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European Commission
Directorate-General for Economic and Financial Affairs

Joint Report on Health Care and Long-Term Care Systems & Fiscal Sustainability

Prepared by the Commission Services
(Directorate-General for Economic and Financial Affairs),
and the Economic Policy Committee (Ageing Working Group)

Country Documents - 2019 Update

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The Economic Policy Committee (EPC) together with the Ageing Working Group (AWG), in cooperation with Commission services (Directorate-General for Economic and Financial Affairs) carried out an analysis of health care and long-term care systems in the EU.

This is an update of the second part of the *Joint Report on Health Care and Long-term Care Systems and Fiscal Sustainability* (European Economy, Institutional Paper 037, Volume 1, October 2016). This part of the report describes the health care and long-term care systems of all EU Member States on a country basis and presents the related policy challenges.

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1. INTRODUCTION

All EU Member States face strong and growing fiscal pressures on their health and long-term care systems, driven by already high levels of public expenditure and debt in most countries, demographic pressures and technological advances⁽¹⁾. Further policy action will therefore be needed to safeguard fiscal sustainability and to sustain the contribution of health care and long-term care systems to improve population health. The need to make health and long-term care systems fiscally sustainable by improving their efficiency and effectiveness should go along with ensuring access to good quality services⁽²⁾.

This report with country documents updates Volume 2 of the 2016 EC-EPC Joint Report on Health Care and Long-term care systems & Fiscal Sustainability⁽³⁾. By highlighting system-specific features vis-à-vis available evidence on international best practice, the country documents represent a versatile tool to support the identification of structural policy options to enhance the efficiency of public spending in health care and long-term care in view of an ageing population and its related challenges. These documents combine a synthetic quantitative approach with a rich qualitative description of the system and this makes them a precious source for evidence-based policy-making. Data ranges from publicly available indicators produced by Eurostat to indicators from the Ageing Report, notably the country-specific projections of health care and long-term care spending. The country documents link and contextualise sources of system inefficiencies, as captured by official statistics, with the projected evolution of age-related spending and of its implications in terms of long-term fiscal sustainability. This allows to gain a deeper understanding of the scope to increase

efficiency by capturing overall system organisation, of the strategy to achieve this outcome, as well as of the level of urgency, based on current and projected spending trends. Indeed, each document reports the country-specific fiscal sustainability assessment by the Commission Services. The concluding sections on recent reforms and on system challenges, used in combination with the sections on efficiency enhancing policy options⁽⁴⁾, provide an overview of possible measures to tackle system-specific criticalities.

What's new

The country documents include a separate document for health care (HC) and long-term care (LTC), detailing the institutional features of each system, the main descriptive statistics and the challenges and policy options, is available for each Member State. As in the 2016 publication, these updated country documents have been co-authored by the Commission Services and the Ageing Working Group of the Economic Policy Committee, representing the national authorities of all the countries included.

While the structure of the documents is unchanged, the descriptions of the health care and long-term care systems have been updated in order to reflect the most recently adopted policy measures as well as those currently planned by national authorities. Notably, the statistics included in the country documents have been updated⁽⁵⁾ including the new long-term expenditure projections of the 2018 Ageing Report (EC (ECFIN) – EPC (AWG))⁽⁶⁾ and the latest assessment of the impact of ageing on fiscal sustainability as formulated in the 2018 Fiscal Sustainability Report (ECFIN)⁽⁷⁾.

(1) See European Commission (2019), "Fiscal Sustainability Report 2018", European Economy, Institutional Paper 094 and European Commission (DG ECFIN)-EPC (AWG) (2018), "The 2018 Ageing Report – Economic and Budgetary Projections for the 28 EU Member States (2016-2070)", European Economy, Institutional Papers 079.

(2) Council Conclusions on 'Public finances: Conclusions on age-related spending', <https://www.consilium.europa.eu/en/press/press-releases/2018/05/25/public-finances-conclusions-on-age-related-spending/>.

(3) See European Commission (2016), "Joint Report on Health Care and Long-term-care systems & Fiscal Sustainability", European Economy, Institutional Paper 037: https://ec.europa.eu/info/sites/info/files/file_import/ip037_voll_en_2.pdf.

(4) These policy options can be found in Volume 1 of the 2016 Joint Report on Health Systems and Fiscal Sustainability.

(5) The cut-off date for incorporating international database updates was set at April 2018. Later updates of the data were only taken in consideration on a case-by-case basis, where it was deemed that omitting the update would compromise the accuracy of the message. The indicators' data sources are listed in the Annex.

(6) https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

(7) https://ec.europa.eu/info/publications/economy-finance/fiscal-sustainability-report-2018_en.

An important update from the previous version is that current health care expenditure is presented, alongside with the customary definition from the System of Health Accounts, in an alternative definition where expenditure on long-term care is excluded as per the aggregate used in the projections of the Ageing Reports. This alternative measure better reflects what is actually spent on health care, excluding the confounder represented by the medical component when in fact associated with LTC services, with the advantage of making expenditure more comparable across Member States often characterised by significantly different long-term care systems.

As for the recent policy developments ⁽⁸⁾ ⁽⁹⁾, in the updates of the sections on legislated or planned measures, the majority of Member States reported having conducted a range of health care system reforms, the impact of which has not yet been captured in the data reported in the statistical annexes. In the past two years, three Member States, EL, CY and IE, embarked on major healthcare reforms to introduce universal access to health care. The majority of the remaining EU Member States have directed their reform efforts towards strengthening primary care (FR, PL, AT, LV, MT, EL and RO) and improving access to and quality of care, including by reducing waiting times (LV, MT and HU), increasing public funding (LV, PL and CZ), and implementing a series of workforce training and retention policies (LV, SK, CZ and RO). To address the expected increase in demand on health care services with the ageing of the population, LV, IT and FR enhanced their disease prevention and health promotion programmes.

Another broadly shared priority in the recent health care reforms in the EU was the advancement of eHealth policies (MT, CZ, SK, DE, AT and PL) and a better monitoring of the performance of health systems through developing Health System Performance Assessment tools (SI and LV). Several Member States have focused their reform efforts on improving the governance

of hospitals after settling (fully or partially) the accumulated hospital arrears with the aim to prevent further indebtedness of the hospital sector (BG, HR, HU and PT). Promising policy actions with regards to their potential in terms of efficiency gains are the introduction / refinement of central procurement of medicinal goods (EL, SK) and better governance of planning capacities for investment decisions in the health care sector (PL, SK).

In general, recent reform activities in long-term care in the EU were less pronounced in number and scope. The overarching reform topics in the past two years were the deinstitutionalisation of care (EL, LV, LT, BG and PL) and the development of national strategies and action plans on dementia (DK, AT, DE, IE, MT, EL and UK). Improving access to home care services was at the core of LTC reforms in DE, IE, SE, CY and MT. Additionally, policies targeting the training of the workforce (SI, DE) and increasing wages in the sector (FR, LU) aim at improving access to and quality of LTC services. Starting from a low spending and coverage for this kind of services, BG and PL have developed national strategies and implementation plans on LTC, while SK have broadened the benefits basket to be covered by the health insurance scheme.

The trends emerging from the policy updates point at common approaches within the areas of health care and long-term care, which appear more clearly when looking at the two systems separately, and highlight the overarching challenge of care-integration. To tackle this and other challenges at the forefront of the EU-level policy debate, the availability of tools such as the Joint Report country documents adds significant value thanks to its potential for cross-country comparisons. Comparability is made easier thanks to the separation between health care and long-term care, and is further expanded in this edition thanks to the addition of the Ageing Report health care aggregate, as mentioned above. Not only does this feature allow national policy makers to benchmark their systems and to learn from policy experiences and outcomes in other Member States, but it also substantiates the EU-level assessment of these systems, providing grounds to advise the lines of policy action deemed necessary in order to achieve, or preserve, compliance with EU standards and ensure future fiscal sustainability.

⁽⁸⁾ The cut-off date for this report was Q4-18, except for requests for factual corrections received by Member States prior to publication.

⁽⁹⁾ Additional information can also be found in the State of Health in the EU country profiles <https://publications.europa.eu/en/publication-detail/-/publication/d16ecda5-cf37-11e7-a7df-01aa75ed71a1>.

Thus, national level policy-making benefits from an implicit cross-fertilisation through the additional layer of EU level policy guidance, which maximises the potential for national initiatives to generate positive spill-overs into other EU systems.

2. HEALTH CARE SYSTEMS

2.1. AUSTRIA

General country statistics: GDP, GDP per capita; population

Austrian GDP per capita has been among the highest in the European Union over the last decades and in 2015 amounted to 34,234 PPS, compared to the EU average of 29,610 PPS. In terms of population, the Austrian population was around 8.6 million in 2015, slowly increasing over the last decade (8.2 million in 2005). It is projected to further increase by 1.5 million from 2016 to 2070, reaching 10.2 million.

Total and public expenditure on health as % of GDP

Total expenditure on health is one of the highest in the EU: 11.1% of GDP in 2015, slightly increasing over the last decade (10.2% in 2005). This is above the EU average of 10.2% in 2015. Public expenditure on health amounted to 8.1% of GDP in 2015, putting Austria in line with the EU average of 8.0%. When measured in per capita terms, in 2015 Austria is above the EU average both in terms of total (4,031 PPS vs. the EU average of 3,305) and public spending (2,965 PPS vs. 2,609 PPS). Looking at health care without long-term care⁽¹⁰⁾ reveals a similar picture with spending at the EU average (6.9% vs 6.8% in 2015).

Expenditure projections and fiscal sustainability

As a result of ageing, health care expenditure is projected to increase by 1.3 pps of GDP, which is higher than the EU average of 0.9 pps over the same period. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 2.1 pps of GDP by 2070, higher than the average EU level of 1.6⁽¹¹⁾.

Over the long run, medium sustainability risks appear for Austria. These are primarily related to the strong projected impact of age-related public

spending (mainly healthcare and long-term care)⁽¹²⁾.

Health status

The last decade saw a steady increase in life expectancy, which grew by 3.3 years since 2000 overall. Between 2005 and 2015, it grew by 2.2 years for men and by 1.5 for women. The Austrian population lives slightly longer than the average EU citizens: in 2015, life expectancy was 0.7 years above the EU average⁽¹³⁾. Broken down by gender, life expectancy at birth of both women (83.7 years) and men (78.8 years) was higher than the EU averages of 83.3 and 77.9 years in 2015⁽¹⁴⁾.

Healthy life years, although with minor fluctuations, have remained quite stable during the past decade⁽¹⁵⁾ and in 2015 amounted to 58.1 years for women (compared to 63.3 years in the EU) and 57.9 years for men (compared to 62.6 years in the EU). Infant mortality of 3.1‰ was in 2015 still slightly below the EU average of 3.6‰⁽¹⁶⁾. As in most other European countries, in Austria non-communicable diseases remain the leading causes of morbidity and mortality. The two main causes of death in Austria are circulatory diseases (such as stroke and myocardial infarction) and malignant neoplasms (cancer), accounting for about two thirds of all deaths⁽¹⁷⁾. A reduction in the most common causes of death was achieved since 2010, though less marked for malignant neoplasms and especially for lung cancer. Cardiovascular diseases still rank first for both men and women (38% and 47% of the total respectively). Cancer currently ranks as the second

⁽¹²⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽¹³⁾ Bachner F, Bobek J, Habimana K, Ladurner J, Lepuschütz L, Ostermann H, Rainer L, Schmidt A E, Zuba M, Quentin W, Winkelmann J. (2018) Austria: Health system review. *Health Systems in Transition*, 2018; 20(3): 1 – 256.

⁽¹⁴⁾ Data on life expectancy and healthy life years is from the Eurostat database.

⁽¹⁵⁾ A break in series exists between 2003 and 2004, so the marked decrease in 2004 has likely a strong methodological component.

⁽¹⁶⁾ Data on infant mortality is from the OECD database.

⁽¹⁷⁾ Bachner F, Bobek J, Habimana K, Ladurner J, Lepuschütz L, Ostermann H, Rainer L, Schmidt A E, Zuba M, Quentin W, Winkelmann J. (2018) Austria: Health system review. *Health Systems in Transition*, 2018; 20(3): 1 – 256.

⁽¹⁰⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹¹⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

cause of death (29% for men and 24% and women respectively). Of particular significance within the group of malignant growths are smoking-related cancers, with lung cancer causing the 5% of total deaths in 2014. Breast cancer also plays a significant role for women, and it caused 2% of overall deaths in 2014 ⁽¹⁸⁾.

In terms of lifestyle-related risk factors, Austria can be classified as follows. While the percentage of obese adults, 14% in 2014, is below the EU average, this is on an increasing path (12.4% in 2006). Obesity also increased amongst adolescents. Consistently, the mortality rates related to diabetes have increased substantially since 2000, from 17.1 to 28.9 per 100 000 population. The percentage of regular smokers (24% in 2014) lies above the EU average for the same year (21%). Alcohol consumption is growing, with 12.3 litres per capita in 2014 (11.9 litres per capita in 2011) and the value for Austria was, according to the latest figures, the third highest in the EU in that year (around 10 litres). Traditionally, the provisions of social insurance law were strongly oriented towards a curative approach, but a series of legislative initiatives have been set up in the last decade, in order to enhance the approach to health promotion and prevention ⁽¹⁹⁾. It is estimated that 28% of the overall burden of disease in Austria in 2015 ⁽²⁰⁾ could be attributed to behavioural risk factors ⁽²¹⁾. Underlying data - and the projections hereafter - suggest that the authorities could continue their efforts to improve population life-styles.

System characteristics

The Austrian health care system has a complex structure based on the federalist structure of the Austrian state. The regulatory responsibility for the health care sector lies with the federal government, with the exception of the system of hospitals. Concerning the latter, the Federal Republic enacts only basic laws, while their implementation and enforcement is under the responsibility of the

states (“*Bundesländer*”). Social insurance providers are supposed to be self-governing bodies, which implies that they have important regulatory functions, especially concerning outpatient health services ⁽²²⁾.

System financing: taxed-based or insurance-based

The Austrian health system is financed from a mix of sources. In 2015, 73.6% of expenditure was public, while 26.4% came from private sources. As for public spending, about 60% comes from health insurance contributions, while about 40% is financed from taxes, mainly general tax revenue; these proportions have remained rather stable.

Revenue collection mechanism (tax/social security contributions/premium)

Mandatory health insurance is based on mandatory contributions paid by all employed people. The contributions amount to a maximum of 7.65% of the contribution basis (generally wage), and they are mostly equally divided into two parts paid by employer and employee, respectively ⁽²³⁾. A statutory 'maximum contribution basis' puts a ceiling on the wages used for the calculation of the contributions. In 2018 this ceiling amounted to €5,130. The contributions are collected and administered directly by the health insurance funds.

Social security funds are the main source of financing in the health system, accounting for more than 50% of current health expenditure ⁽²⁴⁾. The financing of acute hospital care is partially budgeted and is carried out according to performance-related criteria within the framework of yearly budget. The states, which are owners of the hospitals, not only cover investment and maintenance costs, but also contribute to the

⁽¹⁸⁾ State of Health in the EU - Austria. Country Health Profile 2017.

⁽¹⁹⁾ See for instance the Health Promotion Act of 1998, which established the Healthy Austria Fund, and the adoption in 2005 of the "New Preventive Check-up".

⁽²⁰⁾ Measured in terms of Disability Adjusted Life Years (DALYs).

⁽²¹⁾ HiT (2018).

⁽²²⁾ See also Austria - ASISP Annual Report 2009.

⁽²³⁾ Hauptverband der Sozialversicherungsträger (*Main Association of Austrian Social Security Institutions*) (2018) Beitragsrechtliche Werte in der Sozialversicherung 2018. Stichtag: 1. Jänner 2018 Zahlen - Daten - Fakten --> Aktuelle Werte, Vienna: HVB.

⁽²⁴⁾ http://www.euro.who.int/_data/assets/pdf_file/0017/233414/HiT-Austria.pdf, HiT Austria (2013). In the quantification of this share as 50%, expenditure on long-term care is excluded from total current health expenditure.

current expenditure of the hospitals. Hospital debts are also covered at federal level by the states.

Since 2013 Austria imposes a constraint on public spending on health via the budget process ⁽²⁵⁾. The reform includes financial targets and the introduction of a budget cap on public expenditure on health (expenditure containment path). Over the period until 2016, the increase in public health expenditure (excluding long-term care) was gradually aligned with the expected average nominal growth of gross domestic product (plus 3.6% per year) ⁽²⁶⁾. In total it had been agreed to contain expenditures by €3.43 billion until 2016 by the regional governments (€2.058 billion) and the social insurance institutions (€1.372 billion). Actual containment exceeded this value in the period 2013-2016, also due to somewhat non ambitious targets, considering that in 2011 an expenditure growth of 3.3% was recorded and that the expected growth for 2012 was estimated at 3.4% ⁽²⁷⁾.

Administrative organisation: levels of government, levels and types of social security settings involved, Ministries involved, other institutions

As mentioned earlier, the Austrian health system has a complex structure based on the federalist structure of the Austrian state, with a multitude of relevant decision makers ⁽²⁸⁾. Nevertheless, the level of expenditure in administering such a complex system remains about the EU average ⁽²⁹⁾. Public (0.2%) and total (0.4%)

expenditure on health administration and health insurance (HC7) ⁽³⁰⁾ as a percentage of GDP is at the same level as the EU average (0.3% and 0.4% respectively in 2015), and so are public and total expenditure on health administration and health insurance as a percentage of current health expenditure 2.8% vs. 3.4 for the EU and 3.8% vs 3.8% for the EU in 2015 ⁽³¹⁾.

Health care insurance is provided by a number of health insurance funds. They are decentralised self-administrated institutions. The Central Association of Social-Insurance Institutions coordinates the management of the specific institutions. Insured individuals do not have free choice of health insurance fund. They are assigned a given fund according to the location of their employer or occupational group (e.g. self-employed, farmers, civil servants, specific funds for miners, railway employees, etc.) they belong to. Given that the coverage of individual funds is clearly specified, and the funds cannot choose their members according to risk selection or any other criterion, there is no competition between them. However, individual institutions have a large degree of freedom in establishing their administrative procedures.

Coverage (population)

About 99 % of the Austrian population are covered by the social health insurance, organised as a compulsory insurance for people in gainful employment. The insurance contribution covers also dependent members of the family (their share amounts to about one third of the total number covered by the statutory health insurance), while the persons without insurance may have access to the health care system via means-tested social insurance.

⁽²⁵⁾ Austria scored 0 out of 6 in the 2010 OECD scoreboard due to the soft budget constraint.

⁽²⁶⁾ Bachner, F., Bobek, J., Lepuschütz, L., Rainer, L., Zuba, M. (2018) Monitoringbericht I/2018, Vienna: GÖG/BMASGK. Available at: https://www.bmgf.gv.at/cms/home/attachments/9/1/9/CH1_443/CMS1405074131923/monitoringbericht2018_nachbzk1.pdf.

⁽²⁷⁾ Austrian Court of Auditors (2016a). Bericht des Rechnungshofes. Instrumente zur finanziellen Steuerung der Krankenversicherung. Vienna: Austrian Court of Auditors.

⁽²⁸⁾ Irrespective of the reforms of 2005 (The 2005 Health Reform), which were aimed at improving integrated planning by the introduction of a Federal Health Agency, a Federal Health Commission and a Structural Healthcare Plan at the national level and of State Health Funds and Health Platforms at the state level (Austria, ASISP Annual Report 2009).

⁽²⁹⁾ Of course, we have to take into account the important share of the health expenditure as a % of GDP, and the GDP per capita itself.

⁽³⁰⁾ Corresponding to SHA classification HC7 "Governance and health system and financing administration".

⁽³¹⁾ After a data update by Eurostat, AT stands at 2.2% for public expenditure on governance and health system and financing administration (HC7) as a share of current expenditure on health and at 4.1% total expenditure on health administration and health insurance as a percentage of current health expenditure. However this data is not comparable with the figures displayed in this document nor with the EU averages.

Treatment options, covered health services

The benefits guaranteed by the social health insurance system include both in-kind and cash benefits and do not depend on the level of contributions. Further, all health insurance funds are supposed to provide all necessary services. Still, the bundle of "necessary services" is not explicitly defined by law, which may lead to some variations between the funds.

Role of private insurance and out of pocket co-payments

Since an individual person apart from members of selected self-governed professions has no right to opt out from statutory insurance, private health insurance serves predominantly as a supplement to the former and covers additional costs for treatment in private hospitals or serves as an insurance for daily benefits.

Hospitalised patients in standard class accommodation pay a fee of around €1 per day for a maximum of 28 days per year. This fee is collected directly by hospitals. Here again, individuals who already pay a deductible as well as those in need of social protection are exempted from this regulation. Furthermore, since 2017 patients up to the age of 18 years are also exempted. The co-payment for dependants of those insured is slightly higher (between €12 and 19/day depending on the hospital) ⁽³²⁾.

Private expenditure (e.g. patient co-financing and voluntary private health insurance (5.1% combined) ⁽³³⁾ represented around 26.4% of the total health expenditure in 2015, and the share increased from the 2005 value of 23.3% throughout the decade. The figure for 2015 is slightly above the EU average of 21.6% for the same year. Out-of-pocket spending accounts for 17.9% of total current health spending (slightly above the EU average of 15.9% in 2015) and, though slightly fluctuating during the past decade it has remained broadly stable since 2005 (17.8%) ⁽³⁴⁾. Over the same period, the share of

public expenditure out of the total health expenditure has decreased going from 76.7% to 73.6%, but the share of public spending out of total government spending (14.4% in 2015) has remained quite constant over the last decade (14.2% in 2005).

Types of providers, referral systems and patient choice

Patients who are insured in the mandatory social health insurance system, as well as their family members, are provided with electronic health insurance cards (E-Cards) being certificates of entitlement to health services. For each accounting period, which is usually 1 or 3 months – depending on the insurance fund - a patient can choose one general practitioner (GP) and one specialist, for any specialty ⁽³⁵⁾, by means of his/her personal E-Card, which has replaced the former health vouchers. For the issue of an E-Card, a lump sum ⁽³⁶⁾ deductible is paid. He/she can also switch the contract physician with the agreement of the health insurance fund ⁽³⁷⁾.

A large share of primary care is provided by self-employed physicians who predominantly work in individual practices. Patients have also direct access to outpatient clinics which are run by both the social health insurance schemes and by private individuals. Outpatient care is mostly based on contractual relationships between individual private providers and insurance funds, but a large share of patients also opt for outpatient departments of publicly run hospitals.

Hence, private practices are run by self-employed physicians, about half of which are general practitioners and half specialists. The number and regional distribution of self-employed physicians is specified in the "location plan" drawn up by the health insurance funds and the Medical Chamber in order to avoid imbalances in the provision of care. However, there are large differences between rural and urban areas.

Only around 51% of physicians (including dentists) in private practice have a contract with

⁽³²⁾ Source: HIT 2018 and sozialversicherung.at.

⁽³³⁾ Note that Non-profit institutions serving households (NPISH) and company schemes (1.8%) are included in the share of 26.4%.

⁽³⁴⁾ Note that since 2008, prescription charges are limited to 2% of annual net income.

⁽³⁵⁾ For up to 3 specialists by period.

⁽³⁶⁾ €10.85 in 2016.

⁽³⁷⁾ According to the OECD, the level of choice of provider in Austria had a score of 2.7 out of 6 in 2010.

one or more health insurance fund in December 2015⁽³⁸⁾. They exercise to some extent a gatekeeper function as they can control patients' flows by referrals. This is the case when several physicians are consulted in one accounting period or when hospital treatment is required. The other 49% private physicians who do not hold a contract with a health insurance fund do not require E-card intervention and mostly apply much higher fees, whereas their services are reimbursed for four fifths of the fee which the health insurance funds would pay for a "contracted physician".

The number of practising physicians per 100,000 inhabitants (510 in 2015) is above the EU average (344 in 2015) and showing a consistent increase since 2005 (432). The number of GPs per 100,000 inhabitants (77 in 2015) is in line with the EU average (78 for the same year), and has remained stable during the past decade (76 in 2005). This figure, paired with the high number of practicing physicians, suggests that the Austrian health care system is currently hospital centred. The number of practicing nurses per 100,000 inhabitants (805 in 2015) is slightly below the EU average (833) having increased throughout the decade, from a level of 718 in 2005⁽³⁹⁾. Still, there have been concerns about inequalities in the supply structure between the states and also between urban and rural areas. In addition, staff issues may be reinforced by the fact that in 2015 as many as 58%⁽⁴⁰⁾ of all physicians were more than 45 years old in 2012 and many will retire in less than 10 years. These elements suggest that a comprehensive human resources strategy may be necessary in order to ensure that the skill mix stays in favour of a primary care oriented provision, without excessive recourse to it, and face regional disparities and staff ageing.

Hospital care is, according to the law, the responsibility of the states. The Federal Hospitals Act (KAKuG) stipulates that each state is obliged to ensure the availability of inpatient care for people who require it. The states establish the structure of inpatient acute care in quantitative and qualitative terms according to the specifications set

out in health planning⁽⁴¹⁾. As such, inpatient care is predominantly provided by the public entities. A minor share is also organised by the private non-profit-making providers, who operate according to the public law and by private profit-making hospitals⁽⁴²⁾. Hospitals which are subject to public law are obliged to admit and provide services to all patients, but are entitled to receive state subsidies for their day-to-day operations. On the contrary, private for-profit providers have the right to refuse patients, but must finance their operations on their own.

The management structure of the hospital sector changed considerably over the first half of the decade of 2000s, as public hospitals have been assigned operating companies which act according to the private law. A similar change has taken place in the case of private non-profit making companies.

Empirical data suggest overutilisation of hospital care in Austria. The number of available acute care beds (566 per 100,000 inhabitants in 2015), although somewhat lower than a decade before (643 per 100,000 in 2005) is more than 40% higher than the respective amount in the EU (402). At the same time, the inpatient average length of stay of 8.5 days is above the EU average for 2015 (7.6), and the number of inpatient discharges per 100 inhabitants (26) is one of the highest in the EU, more than 60% higher than the EU average of (16). Consistently, the number of day-case discharges is lower than average (7,031 in Austria vs. 7,635 in the EU in 2015). Sectoral fragmentation, which also creates the bias towards hospital care, is a long standing weakness of the Austrian health care system. Therefore, it seems essential to improve the cost efficiency of the hospital care, by reducing the number of beds and replacing acute care stays with day-case treatments or outpatient treatment.

The physicians who operate their private outpatient practice are reimbursed by the insurance funds according to a mixed fee system, which combines lump-sum payment for basic services with fee-for-service for more complex treatments. The level and structure of payment is established in regular

⁽³⁸⁾ Excluding dentists the corresponding share was 45%.

⁽³⁹⁾ Data for density of health personnel is taken from the OECD database. As this figure includes only nurses employed in hospitals, the actual number may be underestimated.

⁽⁴⁰⁾ Source: Austrian Medical Chamber.

⁽⁴¹⁾ HIT 2013.

⁽⁴²⁾ 72.5% of acute care beds are in publicly owned hospitals, 18.8% in not-for-profit privately owned hospitals and 8.7% in for-profit ones.

negotiations between health insurance funds and the Medical Chamber and varies heavily across funds and specialties. In practice, specialists who execute more complicated or technical tasks (in the areas such as radiology or laboratory analysis) are paid almost exclusively according to a fee-for-service scheme, while general practitioners receive proportionately more often flat rate payments per basic case, which are accompanied by basic practice allowances and fees for home visits.

The level of the flat rate fees for basic services varies according to specialty and state. In some states, in order to distribute the general budget more equally among the physicians, it is calculated on a decreasing scale, depending on the number of E-Card certificates invoiced per provider and per accounting period.

About 50% ⁽⁴³⁾ of specialists work exclusively in hospitals and are paid salaries, which vary across states. They can also treat private patients in public hospitals and earn additional incomes from these practices.

Hospitals are paid differently depending on the type of expenditure. Investment and capital costs are borne by the owners and operating companies. The ongoing operating costs are estimated prospectively based on the modified, activity-oriented diagnosis-related groups (DRGs). The units of calculation are points, whose value is established retrospectively at the level of the state by dividing the fixed budget by the number of points performed during the accounting period. In the DRG system two types of payments exist: the nationally uniform DRG core area and the DRG fund control area, which can vary according to the state. Health insurance funds also participate in the funding of hospitals by transferring a fixed share of their resources (about 35%) to the states' hospital funds.

In the core area, procedure- and diagnosis-oriented case groups form the basis for awarding points for an inpatient stay. A nationally uniform number of points is allocated for stays in a number of selected specialised units (intensive care, geriatric care,

psychiatric day care, etc.), while special rules apply for stays which are longer or shorter than the predefined bounds. Financing in the fund control area can be modified by the individual states, which gives them an opportunity to take into account different structural criteria (e.g. hospital type, staff, equipment, state of hospital buildings, utilisation of capacities, quality of accommodation, etc.) when distributing financial resources among the hospitals.

The activity-related hospital financing DRG system was introduced in 1997. The main effect of this measure was a shortening of the average length of stay, but also increased hospitalisations and a shift towards high scoring diagnoses ⁽⁴⁴⁾.

In 2017 it was agreed to introduce the diagnosis-related groups reimbursement system also for ambulatory departments in hospitals. This has the aim to promote a shift of excess capacity from the inpatient to the outpatient sector and a consequent reduction in acute care beds.

The market for pharmaceutical products

Public expenditure on pharmaceuticals ⁽⁴⁵⁾ is just below the EU average when measured as % of GDP (0.9% vs. 1.0% in 2015), and it is also lower when calculated as percentage of public current health expenditure (11.3% vs. 12.7% in 2015).

Austria applies external price referencing when establishing maximum price for reimbursed pharmaceuticals. The price of drugs, taking into account ex-factory and wholesale price level, is included in the Reimbursement Code - or "EKO" ("*Erstattungskodex*"), in place since 2005 - and cannot be higher than the EU average price, as established by the Pricing Committee.

All reimbursable pharmaceuticals are explicitly listed in a list annexed to the Austrian Social Insurance Law. The cost-sharing mechanism takes the form of a flat rate fee paid for each prescription

⁽⁴³⁾ Bachner F, Bobek J, Habimana K, Ladurner J, Lepuschütz L, Ostermann H, Rainer L, Schmidt A E, Zuba M, Quentin W, Winkelmann J. (2018) Austria: Health system review. *Health Systems in Transition*, 2018; 20(3): 1 – 256.

⁽⁴⁴⁾ As a result, the OECD score for remuneration incentives to raise the volume of care in Austria is 3 out of 6.

⁽⁴⁵⁾ Expenditure on pharmaceuticals used here corresponds to category HC.5.1 (pharmaceuticals and other medical non-durables) in the OECD System of Health Accounts. Note that this SHA-based estimate only records pharmaceuticals in ambulatory care (pharmacies), not in hospitals. Data is taken from Eurostat.

by all patients, apart from socially disadvantaged people (in particular elderly pensioners with an income below a certain threshold and persons with communicable diseases) who are exempted. Moreover, a ceiling on prescription fees (*Rezeptgebührenobergrenze*) was introduced in 2008. Patients have to pay the flat rate prescription fee until it exceeds the threshold of 2% of their annual net income. Patients pay out-of-pocket for over-the-counter and non-reimbursable pharmaceuticals, but in some precisely determined circumstances, they can apply for individual reimbursement, which requires an ex-ante approval of the head physician.

Rational prescribing is ensured through the Economic Prescription Guidelines published by the Main Association of Social Security Institutions (MASSI) in 2004. These guidelines encourage doctors to prescribe the most economical pharmaceutical out of several therapeutically similar alternatives⁽⁴⁶⁾. Regional health funds also monitor the prescribing patterns of GPs and specialists who are under contract with them, and provide them with information leaflets and newsletters⁽⁴⁷⁾.

Use of Health Technology Assessments and cost-benefit analysis

A national Health Technology Assessment (HTA) strategy was published in 2010, establishing common goals of the major decision-makers in the health-care sector and creating a framework for expanding the use of HTA. The importance of an evaluation of health technologies as an instrument to support or to control their dissemination and use or to help define policies is increasingly referred to by the public health insurances and hospitals. Several academic institutions⁽⁴⁸⁾ are carrying out

Health Technology Assessments. Preselected medical devices undergo HTA assessment through the annual evaluation of their uptake into the Austrian DRG system. For pharmaceuticals, up until now, there has been no uniform and formal HTA process in place. However, in the outpatient sector pharmaceuticals are evaluated in an HTA related process to establish a positive list of the pharmaceuticals that are covered by the public health insurance scheme.

eHealth, Electronic Health Record

In 2012 the Austrian parliament passed a law to strengthen eHealth in the Austrian health care system by introducing the Electronic Health Record (ELGA). Its implementation is making significant progress together with its e-medication and e-report applications.

The Electronic Health Record (ELGA) is an information system that offers personalised health data to the individual citizens and to their health service providers (hospitals, pharmacies, general practitioners, specialists, etc.). Doctors can access individual medical exams, prescriptions and other relevant health information independently from location and time in order to support their decisions and diagnoses.

ELGA aims to raise quality of care and thus patient safety. It also helps to reduce organisational barriers, avoid duplication of medical exams by improving coordination and ensuring the information flow between health care providers' crosslinking interfaces.

Patients are generally free to opt out of ELGA, but also have the right to ban only certain information within the portal or even a single health care provider from usage. Patients will also be able to check who is accessing their individual record.

Access to ELGA is limited to health care providers. Private companies, health insurers or employers are strictly banned from accessing the health records. The functionalities of ELGA will be implemented stepwise.

⁽⁴⁶⁾ Vogler, S., Schmickl, B., Zimmermann, N., Short PPRI / PHIS Pharma Profile Austria 2013. Vienna: Pharmaceutical Pricing and Reimbursement Information (PPRI) / Pharmaceutical Health Information System (PHIS). http://whocc.goeg.at/Literaturliste/Dokumente/CountryInformationReports/Short_PPRI_PHIS_Pharma_Profile_Austria_2013_final.pdf.

⁽⁴⁷⁾ Vogler, S.; Zimmermann, N., (2013), 'How do regional sickness funds encourage more rational use of medicines, including the increase of generic uptake? A case study from Austria', Generics and Biosimilars Initiative Journal (GaBI Journal) 2/2:65-75.

⁽⁴⁸⁾ Currently: LBI-HTA, GÖG, Donau-Uni Krems, Med-Uni Graz, UMIT.

Health and health-system information and reporting mechanisms

In the past few years, great efforts have been made to build and expand information systems in the health care system with the principal aim of increasing transparency. A series of national guidelines on the systematic documentation of services and costs, particularly in inpatient care, were recently issued or refined.

Health promotion and disease prevention policies

As introduced, some socio-economic risk factors could translate into an important burden of disease and financial costs. This is why the authorities have emphasised somewhat health promotion and disease prevention measures in very recent years. Currently, public and total expenditure on prevention and public health services as a share of GDP (0.2% and 0.2% in 2015) are close, though slightly below, the EU average (0.3% and 0.3% in the same year). The figures are below average when measured, as a % of total current health expenditure, with 2.1% vs. 3.1% for total and 2.1% vs. 3.2% for public expenditure in 2015 ⁽⁴⁹⁾.

Transparency and corruption

Since 2008, anti-corruption legislation has aimed to increase transparency in the formation of waiting lists and to minimise the incentive to make and solicit informal payments but were relaxed slightly again in 2009 ⁽⁵⁰⁾. Doctors have to abide by the medical association's code of conduct ⁽⁵¹⁾, which regulates in this context the cooperation between doctors and pharmaceutical industry regarding attendance at conferences, acceptance of gifts or professional samples. Patients have the possibility of complaint; there are ombudspersons and patients advocates in charge.

Improving transparency within the health care system is also a major target of the health reforms launched in 2013. The target includes improvement of information systems on the

⁽⁴⁹⁾ Data on expenditure on prevention and public health services was taken from OECD.

⁽⁵⁰⁾ HiT 2018.

⁽⁵¹⁾ <http://www.aerztekammer.at/documents/10431/19066/%C3%84rztlicher+Verhaltenskodex+konsolidierte+Fassung/4ce3afe0-57d0-4cc4-923a-0dab81fe045f?version=1.0&t=1387379387000>.

organisation of the system, on providers and services, on the “best point of service” for patients according to their needs, and on the quality of treatments. Equal attention is paid to measures that contribute to the improvement of health literacy of the population and of communication skills of health care providers. Transparency is also improved by the obligation to publish major reform documents and evaluation reports.

Recently legislated and/or planned policy reforms

In order to address the major challenge (fragmentation) of the Austrian health system the Federal Ministry of Health started a reform process in December 2010 by drawing the roadmap for a health reform in the next years. The key element of the reform is a cooperative “governance by objectives” approach for achieving targets which will guarantee better coordination within the system.

The first period of the health care reform (“target-based health governance”) covered the years 2013 to 2016. At the end of the year 2016 the federal government, the regional governments and the social insurance institutions agreed on the continuation of the health reform for the years 2017 to 2021.

First period of the health reform (2013 to 2016)

With the reform of the Austrian Internal Stability Pact, agreement was reached to limit health expenditure growth. In the context of the health system reform plan (2013-2016) the different layers of government agreed to limit public health expenditure growth from 2016 onwards so that it remains in line with expected average nominal GDP growth.

Major elements of the health reform are: 1) the creation of institutional capacity for the effective realisation of the “governance by objectives” approach, 2) enhanced primary health care capacity, 3) standardisation of care processes, 4) monitoring of health indicators and 5) the definition of accounting standards to better enable adherence to the budget cap.

The reform also included financial targets and the introduction of a budget cap on public expenditure

on health (expenditure containment path). The aim was to gradually align the increase in public health expenditure (excluding long-term care) with the expected average nominal growth of gross domestic product (plus 3.6 % per year) over the period until 2016. According to the financial monitoring reports, the states and the social insurance institutions reached their financial targets in the first reform period, though the targets were criticised for their lack of ambition ⁽⁵²⁾.

Already in the first reform period (2013-2016), a contract between the federal government, social insurance institutions and the states had been signed to formalise both health and financial targets. It is divided into four key areas (1) the structure of provision, (2) the process of care, (3) outcome and health targets and (4) financial targets.

In order to raise institutional capacity the “Federal Target-Based Governance Commission” was established in 2013 as a new cooperative decision-making body. The “Federal Target-Based Governance Commission” is responsible for steering and controlling the Austrian health care system. At the state level, nine “Provincial Target-Based Governance Commissions” were established in order to ensure “governance by objectives”.

Second period of the health reform (2017 to 2021)

In the course of the reform of the Austrian Internal Stability Pact an agreement was reached on the legal basis for the health care reform from 2017 onwards.

The priorities for the second period are strengthening of the primary health care sector, fostering of day clinic service provision, increased health promotion and prevention, joint provision and procurement of pharmaceuticals, further strengthening of the public health care system (e.g. focusing on the extension of in-kind benefits), measurement of outcome quality, improvements for health professionals (e.g. skill mix) and e-health.

⁽⁵²⁾ Austrian Court of Auditors (2016a). Bericht des Rechnungshofes. Instrumente zur finanziellen Steuerung der Krankenversicherung. Vienna: Austrian Court of Auditors.

Stakeholders also reached an agreement on the continuation of target-based financial governance mechanisms with the aim of reducing annual growth of public health expenditure (excluding long-term care) stepwise from 3.6 percentage points to 3.2 percentage points in 2021, based on GDP growth.

In April 2017 the federal government, the states and the social insurance institutions agreed on the federal target-based governance contract (“Zielsteuerungsvertrag”) for the years 2017 to 2021, where the agreed measures and financial targets are operationalised. The fragmentation of financing responsibilities between inpatient and ambulatory sector contributes to inefficiencies, especially in the hospital sector. While many reform waves have attempted to improve the coordination and cooperation in the health system, promoting joint planning, governance and financing by putting the Federal Target-Based Commission in charge of implementing the new governance, fragmentation in the organisational and financial structure is still a challenge.

It is promising that the states’ healthcare expenditure, having for many years exhibited a rate of growth above that of other levels of government and above nominal GDP growth, has been much better controlled in recent years. However, the target to converge to 3.2% in 2021 could make compliance more challenging in this second phase.

Following general elections in October 2017, new coalition government decided to merge the Federal Ministry of Health with the Federal Ministry of Labour, Social Affairs and Consumer Protection, forming the new Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK). While there are substantial overlaps with the previous reform agenda, such as strengthening primary health care, reallocation of resources and focus on public health, the new programme also envisages an overhaul of the social security system, with mergers of existing social security funds bringing the number from 21 down to 5. This reform aims to improve the cost-efficiency, transparency and equity of the system ⁽⁵³⁾. A recent comprehensive study of the

⁽⁵³⁾ Country Report Austria 2018 {COM(2018) 120 final}.

Austrian system⁽⁵⁴⁾ concludes that an effective risk adjustment mechanism and reducing the fragmentation in procurement could increase efficiency. While expected benefits are assumed to materialise in the medium/long term, costs from mergers will necessarily materialise in the short term. The new reform is expected to be implemented in the course of 2019.

Challenges

A range of reforms have been implemented in recent years – or are still in the process of gradual implementation – implying substantial structural changes, with a focus on more integrated nation-wide planning, assuring and improving the quality of the health system, and ensuring fiscal sustainability of the health care system. As the analysis above has shown, the main challenges for the Austrian health system currently are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the rising expenditure pressures over the coming decades, which is a risk to the medium and long-term sustainability of public finances.
- To explore if current cost-sharing could be adjusted to discourage overuse/ encourage better use of more effective and cost-effective services – e.g. use of primary care rather than specialist care, and notably more health promotion and disease prevention activities (e.g. vaccination).
- To correct the misalignment between revenue generation and spending, currently characterised by a high level of decentralisation, to improve coordination at sub-federal level and increase efficiency in the provision of health care and reduce unnecessary costs.
- To continue to develop a comprehensive human resources strategy that tackles spatial/regional disparities – inequalities

between the states and between urban and rural areas – and that ensures sufficient numbers of staff in general and in the future in view of population ageing.

- To tackle the excessive degree of hospitalisation, one of the major drivers of the high spending, deriving from the fragmentation of competencies between different government levels, where states and local governments are both involved in providing hospital services, while out-patient care is provided by social security services, and the consequent weak incentives to shift care from hospitals to outpatient settings.
- To control more effectively the use of specialist and hospital care, by strengthening primary health care as a gatekeeper and fostering the coordination of care between primary, secondary and hospital care. To this end, to strengthen/improve the referral system and ensure reimbursement of health care providers delivers the incentives to pursue efficiency goals.
- To improve the cost-efficiency within hospitals, ensuring that care is provided in the most clinically appropriate and cost-effective way, for example by maximising the proportion of elective care provided on a day case basis, day-of-surgery admission and containing unnecessary hospitalisation.
- To monitor and adapt, as necessary, the functioning and competences of the “Federal Target-Based Governance Commission” and the “Federal Health Commission” with a view to give room to further improve, cost control, quality management and efficiency. To monitor how the work of these governing bodies is aligned with fiscal targets established for health care spending, as well as with national public health goals.
- To improve data collection, especially in some crucial areas such as resources and care utilisation; to improve the patient information system.

⁽⁵⁴⁾ LSE Consulting (2017). Efficiency review of Austria’s social insurance and healthcare system. Volume 1 – International Comparisons and Policy Options. London: London School of Economics and Political Science (LSE Health).

- To foster the wide use of Health Technology Assessment and information and communication technologies in health care.
- To further enhance health promotion and disease prevention activities, promoting healthy life styles and disease screening given the most recent pattern of risk factors (smoking, alcohol, cardiovascular diseases).
- To further strengthen the health literacy of the population by improving health information systems and monitoring of health literacy.

Table 2.1.1: Statistical Annex – Austria

General context												EU- latest national data			
GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP, in billion Euro, current prices	254	268	284	294	288	296	310	319	324	333	344	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	32.5	33.4	34.0	33.6	31.4	32.2	32.9	33.8	33.3	33.4	34.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	1.5	2.9	3.4	1.1	-4.0	1.6	2.6	0.2	-0.6	0.0	0.1	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	1.4	3.7	2.9	1.0	1.6	0.8	2.9	-0.3	1.0	0.2	3.7	0.2	0.2	4.1
Expenditure on health*	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Total as % of GDP	10.2	10.1	10.1	10.3	10.8	10.8	10.6	10.9	10.9	11.0	11.1	10.2	10.1	10.1	10.2
Total current as % of GDP	9.4	9.6	9.6	9.6	9.5	9.5	9.9	10.1	10.2	10.3	10.3	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.8	0.5	0.4	0.7	1.3	1.3	0.7	0.8	0.7	0.8	0.7	0.9	0.6	0.2	0.3
Total per capita PPS	2,873	2,966	3,145	3,299	3,393	3,479	3,572	3,754	3,806	3,928	4,031	2,745	2,895	2,975	3,305
Public total as % of GDP	7.8	7.7	7.8	8.0	8.5	8.4	7.9	8.1	8.0	8.1	8.1	8.0	7.8	7.8	8.0
Public current as % of GDP	7.5	7.5	7.5	7.7	8.1	8.1	7.5	7.7	7.7	7.8	7.8	7.7	7.6	7.6	7.8
Public total per capita PPS	2,204	2,277	2,421	2,571	2,661	2,714	2,650	2,774	2,800	2,889	2,965	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.33	0.28	0.31	0.31	0.35	0.36	0.35	0.37	0.36	0.36	0.33	0.2	0.2	0.2	0.2
Public as % total expenditure on health	76.7	76.8	77.0	77.9	78.4	78.0	74.2	73.9	73.6	73.6	73.6	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.2	14.6	14.8	14.5	14.0	14.3	14.6	14.5	14.8	14.0	14.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	98.0	98.5	98.7	98.8	98.8	98.8	99.9	99.9	99.9	99.9	99.9	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	17.8	17.4	17.3	16.9	17.0	17.2	17.8	17.8	18.2	18.1	17.9	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	8.2	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.5	8.6	502.1	503.0	505.2	508.5
Life expectancy at birth for females	82.2	82.8	83.1	83.3	83.2	83.5	83.8	83.6	83.8	84.0	83.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.6	77.1	77.4	77.7	77.6	77.8	78.3	78.4	78.6	79.1	78.8	76.6	77.3	77.7	77.9
Healthy life years at birth females	60.1	61.0	61.4	59.9	60.8	60.8	60.1	62.5	60.2	57.8	58.1	62.0	62.1	61.5	63.3
Healthy life years at birth males	58.2	58.7	58.7	58.5	59.5	59.4	59.5	60.2	59.7	57.6	57.9	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	54	52	48	47	45	43	114	112	112	109	109	64	138	131	127
Infant mortality rate per 1 000 live births	4.2	3.6	3.7	3.7	3.8	3.9	3.6	3.2	3.1	3.0	3.1	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	3.5	3.4	3.4	3.5	3.7	3.7	3.4	3.5	3.4	3.5	3.4	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.5	2.4	2.4	2.4	2.6	2.6	2.5	2.5	2.5	2.6	2.6	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.3	1.3	1.3	1.4	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	3.0	3.0	3.0	3.1	3.2	3.2	3.0	3.0	3.0	3.0	3.0	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.1.2: Statistical Annex - continued - Austria

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	36.8%	35.7%	35.0%	36.3%	38.6%	38.5%	34.4%	34.5%	33.7%	33.5%	33.2%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.7%	0.8%	0.9%	0.9%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	26.2%	25.1%	25.3%	25.4%	27.7%	27.3%	24.7%	24.5%	24.9%	25.0%	25.1%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	14.1%	13.8%	13.9%	14.4%	14.0%	13.8%	12.5%	12.1%	12.2%	12.3%	12.4%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	4.4%	4.3%	4.3%	4.3%	4.7%	4.6%	4.3%	4.3%	4.4%	4.5%	4.5%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.1%	2.1%	2.1%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	4.4%	4.1%	4.0%	4.3%	4.5%	4.4%	3.5%	3.6%	3.7%	3.7%	3.8%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	40.0%	40.0%	39.7%	39.8%	39.9%	40.1%	39.3%	39.4%	38.7%	38.4%	38.2%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	0.4%	0.5%	0.5%	0.6%	0.6%	0.6%	0.7%	0.9%	1.0%	1.0%	1.2%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	22.9%	22.8%	22.9%	22.4%	22.6%	22.3%	23.0%	23.0%	23.4%	23.6%	23.7%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	11.9%	11.8%	12.2%	12.2%	11.1%	10.9%	11.2%	10.9%	10.8%	11.1%	11.3%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	2.7%	2.7%	2.5%	2.6%	2.6%	2.6%	2.5%	2.6%	2.6%	2.6%	2.6%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.3%	2.3%	2.3%	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.1%	2.1%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	3.5%	3.1%	3.2%	3.3%	3.2%	3.1%	2.8%	2.9%	2.9%	2.8%	2.8%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	1.62	1.68	1.77	1.80	1.84	1.86	1.86	1.91	1.92	1.97	2.07	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.9	0.9	0.9	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	3.0	3.0	3.0	3.0	2.9	3.0	2.9	3.0	3.0	2.9	2.9	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	12.4	:	12.8	:	:	:	:	:	14.3	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	23.2	:	22.9	:	:	:	:	:	24.3	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	12.4	12.4	12.5	12.0	11.3	12.1	12.0	12.3	11.8	12.3	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	432	445	453	460	468	478	482	490	499	505	510	324	330	338	344
Practising nurses per 100 000 inhabitants	718	727	738	752	761	767	775	783	787	800	805	837	835	825	833
General practitioners per 100 000 inhabitants	76	77	77	77	77	78	78	78	77	77	77	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	6.7	6.7	6.8	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.6	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	27	28	28	28	28	28	27	27	27	26	26	17	16	16	16
Day cases discharges per 100 000 inhabitants	4,487	4,834	5,113	5,457	5,501	5,690	6,018	6,348	6,595	6,911	7,031	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	86.0	87.0	77.7	78.5	77.9	77.0	76.3	75.2	75.4	75.0	74.3	77.1	76.4	76.5	76.8
Hospital average length of stay	7.0	6.9	7.9	7.9	7.8	7.9	7.8	7.9	8.1	8.2	8.5	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	14.0	14.8	:	16.2	16.5	17.1	18.0	19.0	19.9	20.8	21.3	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	7.0	7.0	7.2	7.3	7.5	7.7	7.9	8.0	8.1	8.2	8.2	8.3	Austria	EU	
AWG risk scenario	7.0	7.1	7.3	7.6	7.9	8.2	8.4	8.6	8.8	8.9	9.0	9.1	Austria	EU	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	8.7	9.0	9.4	9.7	9.9	10.1	10.2	10.2	10.2	10.2	10.2	10.2	Austria	EU	
													17.0	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.2. BELGIUM

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

With €410 billion (2015), the Belgian share in the EU economy is some 2.8%. GDP per capita in 2015 was, with 32,169 PPS, above the EU average of 29,610 PPS for the same year. The population has increased during the past decade, from 10.4 million in 2005 to 11.2 in 2015. Over the decades to come, the Belgian population is projected to continue to increase significantly, from 11.3 million in 2016 to 13.9 million in 2070. This projected increase in population is much higher than that of the EU (23.0 % vs 2.0%).

Total and public expenditure on health as % of GDP

Total expenditure on health, as a percentage of GDP, has steadily increased during the past decade, from 9.7% in 2005 to 10.5% of GDP in 2015. Total expenditure in PPS is with 3,503 higher than the EU average (3,305 PPS per capita). Public (total) expenditure, having increased somewhat steadily over the past decade, is broadly in line with the EU average (8.1% vs 8.0% in 2015), whereas, in per capita terms, it stands slightly above the average with 2,715 vs 2,609 PPS for the EU. Looking at health care without long-term care⁽⁵⁵⁾ reveals a level of spending below the EU average (5.9% vs 6.8% in 2015).

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.4 pps of GDP, below the average growth of 0.9 pps projected for the EU, according to the "AWG reference scenario"⁽⁵⁶⁾. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 0.9 pps of GDP from now until 2070, still lower than the average (EU level: 1.6).

⁽⁵⁵⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽⁵⁶⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

There are high medium-term fiscal sustainability risks, with the indicator S1 at 4.3 pps of GDP, primarily related to the high level of government debt and the projected ageing costs, which contribute 1.2 percentage points of GDP overall. Over the long-term, fiscal sustainability risks are high as well, with the indicator S2 at 4.3 percentage points of GDP driven by the projected ageing costs, contributing 3.5 percentage points of GDP, primarily related to pensions and long-term care expenditure⁽⁵⁷⁾.

Health status

With 83.4 and 78.7 years for women and men respectively, life expectancy at birth in 2015 in Belgium was slightly above the EU average (83.3 and 77.9 respectively). The years spent healthy are also slightly above average, with 64.0 for women and 64.4 (vs the EU average of 63.3 and 62.6, respectively). Infant mortality, which represents the ratio of the number of child deaths under one year of age per 1000 live births, has declined to 3.3. This declining trend is noted throughout the whole of the EU, which averages around 3.6 in 2015.

System characteristics

System financing, revenue collection mechanism, coverage and role of private insurance and out of pocket co-payments

The responsibility for the regulation and financing of the compulsory health insurance lies with the federal government. It also creates the programmes and normative framework for the hospitals. In addition it governs the rules for recognition of providers and organises the registration of pharmaceuticals and their price and determines the rules for financing of healthcare infrastructure (such as costly medical equipment). At federal level, decisions are also made regarding which products and services can be benefitted from under the system.

The compulsory health insurance is combined with a mostly private system of health care delivery, based on independent medical practice, free choice

⁽⁵⁷⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

of physician and predominantly fee-for-service payment.

Financing for the healthcare insurance is obtained through employee and employer contributions and through a contribution from the state budget from the general taxation, complemented with alternative financing by earmarked taxes derived from VAT income. The budget for the system is fixed and is adjusted to inflation and, on top of that, according to a legally inscribed real growth norm. Between 2004 and 2012, the health care budget was allowed to grow by 4.5% per year (since 2004), after adjustment for inflation. However, the actual expenditures were growing slower on average, which, together with the aim of controlling public expenditure, has led to a downward revision of the growth norm in the wake of the financial crisis. The norm was set to 2% in 2012 and 3% in 2013 and 2014. After the change in government in 2014 and the austerity policy it set out to pursue, the growth norm was set to 1.5% from 2015 onward.

Citizens contribute financially to the healthcare system according to their employment situation, their statute (preferential reimbursement or not)⁽⁵⁸⁾, the type of service they request and on the basis of the amount of user charges they have already paid during that year. Users of healthcare services will participate in health-care financing by paying a certain fixed amount of the cost of a service, with the third-party payer covering the balance of the amount. In 2001, Belgium introduced a system of maximum billing. The system has been designed as a structural measure to find a compromise between social protection of the weakest groups in society on the one hand and individual responsibility on the other hand. Thanks to this scheme, each household (both with high and low incomes) has, according to the family's net taxable income, an annual out-of-pocket ceiling for all necessary health care expenses. The ceiling has a minimum and a maximum height.

Almost the whole population (> 99%) is covered for a very broad benefits package. Since January 2008, there is no longer any difference between

⁽⁵⁸⁾ To qualify for preferential reimbursement the patient has to belong to a socioeconomically vulnerable group and have an income below a certain limit. In addition, patients with certain medical conditions or chronic diseases are exempted from cost-sharing.

health insurance coverage in the general scheme and the scheme for the self-employed, as the latter now includes the coverage of minor risks.

A large majority of the population hold voluntary health insurance (both complementary and supplementary), covering for example single room accommodation for hospitalised patients. These insurances are being provided by both the sickness funds and private for profit insurance companies. Private health insurance is relatively limited in importance, as it represented around 4.8% of total (current) health expenditure in 2015⁽⁵⁹⁾, and covered mostly inpatient expenditure, even when larger coverage (ambulatory care and dental care) also exist.

Private expenditure (patient co-financing and voluntary insurance) in Belgium is higher than the EU-average (around 22.5% of total expenditure). This share used to be higher, 28.4% in 2005, but the share of public expenditure out of the total has increased from 2005 to 2015 from 71.6% to 77.5%, closer to the EU average of 78.4%. Out-of-pocket expenditure alone, however, displays at 17.6% in 2015, a wider gap with respect to EU.

Administrative organisation

The compulsory health insurance is executed through six private, not-for-profit national associations of sickness funds and one public sickness fund. It is their major responsibility to reimburse health service benefits. The sickness funds are members of the National Institute for Health and Disability Insurance (NIHDI-RIZIV-INAMI). Since 1995 a trend has started to make Belgian sickness funds more financially accountable for their expenses made. They act collectively in their negotiations with health care providers.

The public expenditure on healthcare administration and health insurance in Belgium in 2015 is, with 0.3% of GDP, in line with the EU average for the same year (0.3% of GDP).

⁽⁵⁹⁾ <http://ec.europa.eu/eurostat/web/health/health-care/data/database> (SHA).

Treatment options, covered health services

The services that are covered by compulsory health insurance, which is characterised as a fee-for-service system, are described in the nationally established fee schedule (more than 8000 services), the so called 'nomenclature'.

Types of providers, referral systems and patient choice

National planning sets various targets and accreditation norms that institutions must follow. Access to professions is regulated by law. The Belgian health system is mainly based on the principles of equal access and freedom of choice. All residents have to register to a Bismarckian-type of public compulsory health insurance (sickness funds) which offers a very broad benefits package (a positive list of goods and services is defined at the central level).

Belgium has a well-developed system of primary care. The service is provided through independent general practitioners (GPs, or "family doctors"). Some GPs provide their services in group practices. There are relatively many GPs in Belgium, compared to other EU Member States (113 vs 78 in the EU respectively per 100 000 inhabitants in 2015). The Belgian government aims at a strengthening of the role of the GP, for example in the treatment of chronic diseases. The current apparent over capacity could facilitate that shift.

Specialist outpatient care is provided predominantly in hospital outpatient departments and at times in private group practices.

Day care and inpatient treatment is provided in hospitals. Two thirds of the hospital acute beds are owned by private not-for-profit hospitals. The rest of the hospitals are publicly owned. The number of acute care beds per 100 000 inhabitants (518 in 2015), while showing a reduction, is still well above the EU average (402). Overall there are not so many physicians per inhabitant in Belgium compared to the EU average (302 compared to 344 per 100 000 inhabitants)⁽⁶⁰⁾. The amount of

⁽⁶⁰⁾ Note that the actual figures may be underestimated as Belgium limits the count to physicians with a minimum amount of activity, whereas other countries count all

practising nurses per 100 000 inhabitants on the other hand is higher than in the average EU level (1,083 in Belgium and 833 in the EU in 2015).

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Two systems of payment are implemented, the first one is a reimbursement system (for outpatient/ambulatory care) and the second one is a third-party payer system where the patient pays only the co-insurance or the co-payment (for inpatient care and pharmaceuticals). The third-party payer system is gradually being further enlarged and implemented also in ambulatory care.

Most health care professionals are self-employed and are paid on a fee-for-service basis, with the patient partly reimbursed (generally at a rate of 75%) afterwards. Indeed, less than 1% of the physicians working in hospitals are employees. Nurses are mainly salaried in comparison. To avoid competition between services from hospitals or from office-based specialists, the same national negotiated fee is imposed. However, when working in hospitals, the specialists allow the institutions to retain a proportion of the fees as compensation for the space, equipment, staff and additional services. The government sets the fees for GPs and specialists every two years following a bargaining process with representatives of the concerned parties. Only non-contracted physicians can set their fees freely even if the contracted can, in some specific cases like activity outside core time for example, charge higher fees. The same principle applies to dentists, pharmacists and self-employed nurses. In Belgium the remuneration gap is particularly large between GPs and specialists with GPs earning three times less than specialists even if some efforts have been made recently to decrease this gap. A possibility has been created for GPs to receive compensation/pay for the management of chronic diseases.

Inpatient care is covered by the third-party payer system. The patient pays a co-payment while the bulk of the cost is directly paid by the sickness fund to the hospitals. For the hospitals' running costs, a national budget⁽⁶¹⁾ is set annually and

physicians who have had at least one patient contact per year.
⁽⁶¹⁾ This budget only covers about 50% of the hospitals' operational costs. The other half is financed by fee-for-

paid to the hospitals via the sickness funds with an aim to make the hospitals accountable for their operations by means of financial rewards or fines. Hospitals are paid on a combination of⁽⁶²⁾: “common services” (about 25%) based on surface area, number of cases, number of patient days etc., “clinical services” (about 47%) based on volume and type of activity, intensity of nursing services and other activity indicators, and “legally required services” (general surgeon, hospital hygiene, registry keeping, quality policy and monitoring, hospital pharmacy) (about 14%) and other smaller items. Hospital activity is in line with the average, with hospital inpatient discharges at 16 per 100 inhabitants in 2014 (EU average 16 in 2015 and in 2013). Belgium is characterised by substantially higher than average (more than double) numbers of day case discharges (15,922 in 2014 vs. 7,635 in 2015 and 7,143 in 2013). Day case surgery has increased significantly in the last decade (from 39.5 in 2005) and the percentage of surgical procedures conducted as day cases in 2014 (50.1%) is well above the EU average for 2013 and 2015 (30.9% and 32.3%). From 1982, the “number of days” for an inpatient stay is subject to restrictions (pathology weighted) to discourage hospitals to extend stays for financial reasons. Despite that kind of control procedure, Belgium had for long time a hospital average length of stay above the EU average, but this has decreased through the past decade, bringing Belgium in line with the average. The average is currently 7.6 (2014) vs 7.6 days in the EU in 2015 and 7.7 in 2013.

One of the key advantages of the Belgian system is that the precise price setting (flat rate) avoids unexpected fees for the patient. However, in hospitals, the patient's out-of-pocket contribution per day of hospitalisation may vary if there are additional costs for a single room, non-reimbursable products or non-publicly contracted physicians. Recent legislation however, obliges hospitals to provide a cost estimate of the treatment to the patient at the admission.

service payments by the NIHDI and patient out-of-pocket (or private insurance) payments (mainly physicians' fees and drugs).

⁽⁶²⁾ CM 2013, De organisatie en financiering van de ziekenhuizen. CM Informatie nr. 253 (info fiche) [also available in French].

The market for pharmaceutical products

Pharmaceuticals are exclusively distributed through community pharmacies and hospital pharmacies and their establishment is strictly regulated since 1973.

Total expenditure in Belgium on pharmaceuticals as a percentage of GDP has over the last few years quite closely matched the EU average, which was still the case in 2015 with 1.0 % of GDP, both for Belgium and the EU.

About 2500 pharmaceuticals are reimbursable in Belgium. The initial price of reimbursed drugs is based on clinical performance, economic evaluation and cost of existing treatments, and looking at the average EU price. The amount reimbursed is determined by the pharmaceutical category that reflects the social importance of the drug, pharmacotherapeutic criteria and price criteria. The patient pays only the non-reimbursable amount as a co-payment to the pharmacy. Authorities also use reference pricing whereby the reimbursement level of a drug is based on the prices of drugs that have the same active ingredient.

The sickness funds negotiate as a cartel with the drug companies on reimbursement rates under the supervision of the central government. The central government can also as an extreme measure oblige pharmaceutical firms to pay a special tax when expenditures on pharmaceuticals are too high (a sort of payback system). However, the main policy instruments to stem (public) cost increases during the last decade have been price regulation and increases in co-payments.

Since 2001, the use of generics has been stimulated by introducing lower co-payments for the users and lower reimbursement levels for branded drugs when generics are available. Generic drugs must be at least 30% cheaper than originators. Doctors are encouraged to prescribe generic medicines through prescription quotas. Pharmacists are encouraged to provide the generic drug when available, for some categories of drugs, the substitution is compulsory (providing the patient with the cheapest or generic variant with the same active molecule of a prescribed drug). Information on generics is provided to health professionals and to the public.

Authorities promote rational prescribing by physicians through compulsory guidelines and prescription quotas, complemented with monitoring of prescribing behaviour and education and information campaigns on the prescription and use of medicines. They also promote education and information campaigns for patients.

Despite the success of the measures introduced so far, research ⁽⁶³⁾ suggests that there is scope for further cost savings, which suggests progress towards the wider adoption of more cost-effective solutions should be pursued.

Use of Health Technology Assessments and cost-benefit analysis

The Belgian Health Care Knowledge Centre has played a major role in conducting and gathering information on health technology assessment since 2003. Health technology assessment information has been used to define guidelines and determine coverage and level of reimbursement of new procedures, new medicines and new high-cost equipment.

eHealth (e-prescription, e-medical records)

Belgium has established a public institution for e-health with the law of August 28 2008. The organisation's mission is 'to optimise the quality and continuity of health care provision and patient safety and to streamline administrative procedures by means of mutual electronic services and data exchange between all health care actors, while guaranteeing information security and respecting patient privacy ⁽⁶⁴⁾.

The mission translates into a number of tasks, such as the development of software platforms for safe information exchange between health professionals and between care providers and administrative services (the Federal Public Service for Health, Food Chain Safety and the Environment, the National Institute for Health and Disability Insurance, etc.) and managing and coordinating the

ICT-related, organisational, functional and technical aspects of data exchange related to electronic patient records and electronic prescriptions. The organisation also acts as a 'trusted third party' for coding, anonymising and linking data requested by academic or public or private sector researchers.

Health and health-system information and reporting mechanisms

Monitoring and data collection has been widely implemented in the Belgian health-care system. Dedicated databases like Pharmanet, NMDS ⁽⁶⁵⁾ or HDS ⁽⁶⁶⁾, allow the control of the medical practice of individual physicians (volume of activity, prescription activity) and whether it complies with treatment guidelines. It also enables among other things the monitoring of health problems and the epidemiological situation or the effectiveness and quality of hospital care. The global set of data is very wide even if the collection of data about voluntary private health insurance or about care and nursing homes could be improved. The performance of the Belgian health care system is monitored continuously and reported periodically ⁽⁶⁷⁾.

Health promotion and disease prevention policies

In Belgium, the communities and partially the federal state are responsible for prevention, promotion and education on health. In 2015, public expenditure on prevention and public health services reached 0.2% of GDP, which is below the EU average for the same year (0.3%). The most recent health promotion campaigns included: healthy eating, organ donation, deadly accident prevention, abuse of antibiotics, promotion of vaccinations and breast and cervical cancer screening.

Transparency and corruption

In 2008 Belgium signed the 'Tallinn Charter' on 'Health Systems for Health and Wealth' at a ministerial conference in Estonia organised by the

⁽⁶³⁾ Cornelis, K., Het geneesmiddelenbeleid inzake goedkopere geneesmiddelen in België, Brussels, September 2013; http://www.cm.be/binaries/CM-253-Genesmiddelen_tcm375-130001.pdf.

⁽⁶⁴⁾ See <https://www.ehealth.fgov.be/nl/over-het-ehealth-platform/wetgeving/wet> (only available in Dutch and French).

⁽⁶⁵⁾ Nursing Minimum Data Set.

⁽⁶⁶⁾ Hospital Data Set.

⁽⁶⁷⁾ See: Vrijens et al. 2016, De performantie van het Belgische gezondheidssysteem - Rapport 2015. KCE Rapport 259A (Dutch and French).

World Health Organisation European Office. One of the commitments of the signing member states was to 'promote transparency and be accountable for health system performance to achieve measurable results'. This commitment has fuelled an ongoing policy debate in Belgium regarding the best ways to improve the transparency of health care provision. This debate focuses mainly on using transparency to improve informed patient choice and quality of service. One example of this approach is to measure and publicise hospital performance indicators. The feasibility of this idea is currently being tested in Flanders as part of the 'Flemish Indicators Project'. Participating Flemish hospitals measure a number of performance or quality indicators on a voluntary basis and decide whether they publish the results online. Many of them also conduct patient satisfaction surveys on a regular basis ⁽⁶⁸⁾.

A recent government bill has been approved aimed at improving the transparency of medical costs charged to patients. The bill aims to improve the disclosure of the details of the medical interventions and the associated full costs, both for the patients (co-payments and supplements) and for the health insurance funds (reimbursements). Hospitals will have to provide patients with detailed information on expected costs before they are admitted.

Recently legislated and/or planned policy reforms

The main change in health care policy legislated in the recent years concerns the devolution of responsibilities (and shifts in associated budgets) for a number of health care tasks from the federal to the regional level (Flanders, Wallony and Brussels) as a consequence of the 6th Reform of the State. The reform was signed into law on January 31 2014 and became effective on July 1 2014. While the transferred responsibilities mainly concern care for the elderly (see country document on long-term care), some may be classified as acute care expenditures. A few notable examples are geriatric hospital services, revalidation, mobility aides, prevention and the maximum

billing (MAB) payments. The total budget shift from the federal to the regional level is estimated to be approximately 3.4 billion euros in 2015, almost 12% (400 million euros) of which will be (acute) health care expenditures ⁽⁶⁹⁾. At the time of writing there is no information available as to how the regional authorities will manage their new responsibilities, including if and how they may change the rules that govern the use of services and the associated public expenditures. Consequently, the current Belgian projections at the national level assume that the regionalised health care expenditures will evolve according to the same mechanisms that pertained at the federal level.

Ongoing efforts to improve the performance of the Belgian health care system are detailed in the annual Policy Notes of the Minister responsible for public health and health care. The most recent Policy Note, issued in November 2014 ⁽⁷⁰⁾, discusses a government bill aimed at improving the accessibility of health care, the continuing integration of chronic care, the execution of the eHealth platform and the strengthening of primary care. Planned structural reforms envisage the reform of hospital financing, the expansion of mental health care services and a stronger focus on evidence-based medicine.

An important recent policy reform concerns the pharmaceutical industry. The Minister of Health and Social Affairs has signed a 'Pact for the Future' with the Belgian pharmaceutical sector, aimed at improving the accessibility to innovative therapies while containing pharmaceutical spending. The agreement provides a framework that combines cost containment with measures to stimulate innovation, especially in the area of orphan drugs. In order to achieve this, a multi-year budget aimed at providing perspective and predictability of the revenues of the sector has been agreed.

⁽⁶⁸⁾ See <https://www.zorg-en-gezondheid.be/Beleid/Kwaliteit/Welke-ziekenhuizen-meten-hun-kwaliteit-met-VIP%C2%B2/> (only available in Dutch).

⁽⁶⁹⁾ RIZIV, Budget 2016. Technical estimates for 2015-2016 (internal document).

⁽⁷⁰⁾ See http://www.deblock.belgium.be/sites/default/files/articles/2014_11_25_Beleidsnota%20Gezondheidszorg_54K058800_7.pdf.

Challenges

The analysis above shows that a number of reforms have been implemented over the years, aiming to improve the quality and efficiency of care delivery, and which Belgium should continue to pursue. The main challenges for the Belgian health system are as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated care as well as a focusing on costs in view of the relatively high spending on health care as a share of GDP and increasing health care expenditure over the coming decades, which will accompany the high projected demographic growth.
- To ensure that the recent responsibilities of the regional governments and the management of the budgets they have acquired with the recent reform of the state are well coordinated horizontally, with other regions, and with decisions at the federal level to avoid duplications and inefficiencies.
- To further the efforts in the area of pharmaceuticals considering additional measures to improve the rational and cost-effective prescribing and usage of medicines, such as information and education campaigns, the monitoring of prescription of medicines and incentivising the uptake of generics, as already successfully implemented in the past years. The policies could help improving population health and improving access to cost-effective new medicines while generating savings to the public payer.
- To strengthen the role of primary care as a gatekeeper by expanding the current incentives in place, both for doctors and patients, to contain direct access to specialist care, for instance, by making referrals compulsory. To make use of high capacity of GPs to support patients in their management of chronic conditions as envisaged.
- To monitor the issue of financial access, in light of the high level of co-payment, while ensuring that enough incentives to discourage over-consumption of health care services are preserved.
- To continue to improve data collection and monitoring of inputs, processes, outputs and outcomes, focussing in the areas of voluntary private health insurance and on care and nursing homes, so that regular performance assessment can be conducted and used to continuously improve access, quality and sustainability of care.
- To further enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening.

Table 2.2.1: Statistical Annex – Belgium

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	311	327	345	354	349	365	379	388	392	400	410	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	30.9	31.3	31.8	30.9	29.5	30.6	30.7	30.9	30.6	31.2	32.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	1.5	1.8	2.7	0.0	-3.0	1.8	0.9	-0.4	-0.3	0.9	0.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	1.1	3.1	3.3	3.9	0.9	1.4	2.2	-3.2	1.1	-0.1	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	9.7	9.6	9.6	9.9	10.7	10.6	10.6	10.9	10.6	10.6	10.5	10.2	10.1	10.1	10.2
Total current as % of GDP	9.0	8.9	9.0	9.3	10.1	9.9	10.1	10.2	10.4	10.4	10.5	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.7	0.2	0.2	0.0	0.9	0.6	0.2	0.3
Total per capita PPS	2,632	2,723	2,866	3,018	3,160	3,253	3,345	3,485	3,406	3,468	3,503	2,745	2,895	2,975	3,305
Public total as % of GDP	6.9	6.8	6.7	7.2	7.8	7.7	7.7	7.8	8.0	8.0	8.1	8.0	7.8	7.8	8.0
Public current as % of GDP	6.9	6.8	6.7	7.2	7.8	7.7	7.8	7.9	8.0	8.0	8.1	7.7	7.6	7.6	7.8
Public total per capita PPS	1,884	1,924	2,010	2,185	2,316	2,368	2,458	2,533	2,587	2,635	2,715	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.2	0.2	0.2	0.2
Public as % total expenditure on health	71.6	70.6	70.1	72.4	73.3	72.8	73.5	72.7	76.0	76.0	77.5	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	13.5	14.6	15.2	15.1	14.8	14.8	14.8	14.5	14.8	14.6	14.2	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	99.0	99.0	99.0	99.5	100.5	101.5	98.8	99.0	99.0	99.0	99.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	18.2	18.8	19.2	18.5	18.3	18.3	18.3	18.0	18.1	18.2	17.6	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status												2009	2011	2013	2015
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	10.4	10.5	10.6	10.7	10.8	10.8	11.0	11.1	11.1	11.2	11.2	502.1	503.0	505.2	508.5
Life expectancy at birth for females	81.9	82.3	82.6	82.6	82.8	83.0	83.3	83.1	83.2	83.9	83.4	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.2	76.6	77.1	76.9	77.3	77.5	78.0	77.8	78.1	78.8	78.7	76.6	77.3	77.7	77.9
Healthy life years at birth females	62.3	63.2	63.9	64.1	63.7	62.6	63.6	65.0	63.7	63.7	64.0	62.0	62.1	61.5	63.3
Healthy life years at birth males	62.4	63.0	63.5	63.4	63.9	64.0	63.4	64.2	64.0	64.5	64.4	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	58	54	53	52	50	:	106	104	104	95	94	64	138	131	127
Infant mortality rate per 1 000 live births	3.7	4.0	3.9	3.8	3.5	3.6	3.4	3.8	3.5	3.4	3.3	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP												2009	2011	2013	2015
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	2.3	2.5	2.5	2.6	2.8	2.8	2.8	2.9	2.9	2.9	3.0	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.0	1.6	1.6	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.6	1.5	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.5	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.9	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.6	1.2	1.2	1.1	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.2.2: Statistical Annex – Belgium

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	25.2%	27.7%	27.8%	28.2%	28.0%	28.0%	28.2%	28.1%	28.1%	28.0%	28.5%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	3.5%	1.5%	1.5%	1.5%	1.5%	1.7%	1.8%	1.8%	1.8%	1.7%	1.4%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	21.7%	17.9%	18.3%	16.6%	17.1%	17.4%	17.8%	18.3%	18.5%	18.8%	18.7%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	17.1%	16.5%	16.6%	16.4%	15.8%	15.6%	15.4%	14.6%	14.3%	13.8%	14.2%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	1.5%	1.6%	1.7%	1.7%	2.1%	2.1%	2.1%	2.1%	2.2%	2.2%	2.0%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.3%	1.8%	1.8%	1.8%	2.2%	1.6%	1.7%	1.7%	1.7%	1.8%	1.7%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	4.5%	4.7%	4.1%	4.4%	3.7%	3.7%	3.8%	3.5%	3.5%	3.6%	3.4%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	27.0%	29.3%	28.9%	28.7%	28.2%	28.1%	28.4%	28.3%	28.3%	28.0%	28.4%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	4.2%	1.5%	1.5%	1.5%	1.7%	2.0%	1.9%	2.0%	2.0%	1.9%	1.5%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	22.5%	17.5%	17.8%	15.9%	16.4%	16.3%	16.3%	16.4%	16.8%	17.1%	16.7%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	13.3%	12.7%	13.1%	13.5%	13.3%	13.5%	13.4%	12.9%	12.3%	12.1%	12.7%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1.1%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.9%	2.2%	2.2%	2.2%	2.7%	2.0%	2.1%	2.0%	2.1%	2.2%	2.1%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	4.6%	4.9%	4.2%	4.5%	3.7%	3.8%	3.6%	3.4%	3.4%	3.4%	3.1%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.70	0.71	0.75	:	:	:	:	:	:	:	:	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	1.4	1.4	1.3	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	3.9	4.0	4.2	:	:	:	:	:	:	:	0.0	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	14.0	:	:	:	:	13.7	13.7	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	20.3	22.0	22.0	18.9	:	:	:	:	18.9	:	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	12.3	11.0	10.3	10.5	10.1	10.2	10.1	10.1	11.8	12.6	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	287	289	291	292	292	291	291	293	295	298	302	324	330	338	344
Practising nurses per 100 000 inhabitants	901	912	924	932	942	957	980	1000	1028	1058	1083	837	835	825	833
General practitioners per 100 000 inhabitants	118	116	115	114	112	112	111	111	112	112	113	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	7.2	6.5	6.5	6.8	6.9	6.6	6.7	6.7	6.7	6.7	6.8	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	16	16	16	16	16	:	16	16	16	16	:	17	16	16	16
Day cases discharges per 100 000 inhabitants	10,497	10,773	11,359	12,554	12,832	:	15,149	15,546	15,343	15,922	:	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	75.0	74.0	73.6	74.0	78.1	78.2	78.0	78.4	79.6	78.4	:	77.1	76.4	76.5	76.8
Hospital average length of stay	7.7	7.2	7.8	8.1	8.2	8.1	8.0	7.9	7.8	7.6	:	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	39.5	40.5	41.9	:	44.7	:	48.9	49.5	49.4	50.1	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.9	5.9	6.0	6.0	6.1	6.2	6.2	6.3	6.3	6.3	6.3	6.3	Belgium	EU	
AWG risk scenario	5.9	6.0	6.1	6.2	6.3	6.5	6.6	6.7	6.7	6.8	6.8	6.9	0.4	0.9	
													0.9	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	11.3	11.6	11.9	12.3	12.6	12.8	13.1	13.3	13.4	13.6	13.7	13.9	Belgium	EU	
													23.0	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.3. BULGARIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

GDP per capita in PPS is at 12,500 and around half of the EU average of 29,600 in 2015. Bulgaria has a population of 7.1 million inhabitants. During the coming decennia the population will steadily decrease, from 7.1 million inhabitants in 2016 to 4.9 million inhabitants in 2070. Thus, in Bulgaria the population is expected to decrease by 32%, while it is expected to increase at the EU level by 2%.

Total and public expenditure on health as % of GDP

Total expenditure ⁽⁷¹⁾ on health as a percentage of GDP (8.9% in 2015, latest available data) has increased over the last decade (from 7.3% in 2005) but remains below the EU-average ⁽⁷²⁾ of 10.2% in 2015. Throughout the last decade, total public expenditure has first decreased as % of GDP but has recently recovered from 4.6% in 2005 to 4.9% of GDP in 2015 (EU: 8.0% in 2015). Public spending as a share of GDP is one of the lowest in the EU. Looking at health care without long-term care ⁽⁷³⁾ reveals a similar picture with public spending below the EU average (4.9% vs. 6.8% in 2015). When expressed in per capita terms, also total spending on health at 1,232 PPS in Bulgaria in 2015 was far below the EU average of 3,305 in 2015 ⁽⁷⁴⁾. So was public spending on health care: 675 PPS in 2015 vs. an average of 2,609 PPS in 2015. Overall, Bulgaria devotes relatively few resources to health care.

⁽⁷¹⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + capital formation on health care from COFOG.

⁽⁷²⁾ The EU-averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU-average for each year is based on all the available information in each year.

⁽⁷³⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽⁷⁴⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to EUROSTAT data series, which reflect current expenditure only.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.3 pps of GDP, below the average growth expected for the EU of 0.9 pps of GDP, according to the "AWG reference scenario". When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 1.3 pps of GDP from now until 2070 (EU: 1.6) ⁽⁷⁵⁾.

Bulgaria does not appear to face fiscal sustainability risks. In the short and medium-term risks are low. Also in the long term, Bulgaria faces low fiscal sustainability risks, due to a favourable initial budgetary position, which counterbalances the risks associated with the projected ageing costs (incl. pensions and health care) ⁽⁷⁶⁾.

Health status

Life expectancy at birth (78.2 years for women and 71.2 years for men in 2015) is one of the lowest in the EU, while healthy life years (65.0 years for women and 61.5 years for men in 2015) are above the respective EU averages (63.3 and 62.6 in 2015). Mortality rates, which are thought amenable if appropriate and timely care is delivered, are also high (282 in Bulgaria vs. 127 deaths in the EU per 100,000 inhabitants). The infant mortality rate of 6.6‰ is very high compared to the EU average of 3.6‰ in 2015, having gradually fallen over the last decade (from 10.4‰ in 2005).

As for the lifestyle of the Bulgarian population, the data indicates a high proportion of regular smokers (27.3% in 2014), being above the EU average of 21.8%. The proportion of the obese population is below EU level of 14.4% (EU: 15.5%), while the alcohol consumption is above the EU level.

⁽⁷⁵⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁷⁶⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

System characteristics

Overall description of the system

The health system is a system of compulsory health insurance with contributions from employees and contractual relationship between the National Health Insurance Fund (NHIF) as purchaser of services and healthcare providers. NHIF acts as a single buyer of health services and runs the mandatory health insurance for the Bulgarian citizens. NHIF is separated from the structure of the public healthcare system and has its own governing bodies. The mission of the NHIF is to provide free and equal access for the insured persons to medical care for a defined package of health services and the free choice of a contracted provider.

Coverage

A system of mandatory social health insurance is designed to provide coverage for the residing population.

The majority of the population takes part in the health insurance system. The share of the people without health insurance payments for 2014 amounts to approximately 7 % (516 753 people). The 2015 amendments to the Health Insurance Act⁽⁷⁷⁾ led to recovery of the health insurance rights of 195 726 Bulgarian citizens for the second half of 2015.

According to the data of the "Civil Registration and Administrative Service Directorate General" (GRAO) until the end of 2014 approximately 1,630,000 people who have their permanent address in Bulgaria had foreign residence and are not legally obliged to take part in the obligatory health insurance system⁽⁷⁸⁾.

Health The structure of insured is as follows: 45% insured by the employer, 4% self-insured and approximately 44% insured by the state. coverage is provided by the state for the following population groups: any person who has not attained the age of 18 years, if attending school as

a full-time pupil until completion of secondary education, but not later than the attainment of the age of 22 years; any full-time student enrolled in a higher school until attainment of the age of 26 years, and any full-time doctoral candidate enrolled within the state quota, as well as all retired people. People without incomes receive social assistance from the Social Assistance Agency. Long-term unemployed people without incomes and real estate have the right to get their hospital treatment paid for by the Fund of the Ministry of Labour and Social Policy on the basis of their property status proven. This fund amounts to BGN 5 million per year.

All women in Bulgaria have the right to receive free of charge health services for giving birth, regardless of their health insurance status. Similarly, all pregnant women have access to free health care services, regardless of their health insurance status. The access to emergency medical care is free for all, regardless of health insurance status.

Administrative organisation and revenue collection mechanism

The National Health Insurance Fund (NHIF) pools the compulsory social health insurance wage-related contributions of employed individuals and the general tax revenue allocated by the government, which covers for the contributions of the non-working population (pensioners, unemployed, people taking care of disabled members of the family, people with right to social welfare, etc). The NHIF carries out the financing of the healthcare network through its 28 regional authorities (regional health insurance funds). The NHIF contracts health services from general practitioners (GPs), specialists in outpatient departments, medical laboratories, dentists and hospitals for the insured population and provides for medication and medical devices.

A system of accreditation of medical facilities is organised by the Ministry of Health with the participation of the NHIF, the Bulgarian physicians', dentists' and patients' associations. In addition, a system for medical audits and monitoring is established by an executive agency, responsible for developing uniform criteria for assessing the efficiency and effectiveness of health care services.

⁽⁷⁷⁾ State Gazette, Vol. 72/18.09. 2015, Vol. 79/13.10.2015, Vol. 98/15.12.2015.

⁽⁷⁸⁾ There is no official information on the number of people residing in Bulgaria without social health insurance coverage.

Bulgaria has a mixed system of health care financing. The Bulgarian health care system is financed from three main sources: compulsory health insurance contributions, general taxation, and household private expenditure.

Role of private insurance and out of pocket co-payments

While the state provides free, universal access to emergency health care, private expenditure plays an important role in financing health care in Bulgaria. In 2015, public expenditure accounted for only 54.8% of total health expenditure (EU: 78.4%) and out-of-pocket expenditure was at the very high level of 47.7% of total health expenditure. The role of private insurance is very limited.

Out-of-pocket payments take three main forms: direct payments, cost-sharing and informal payments. Direct payments in Bulgaria include payments for specialist services without a GP referral, payments to the providers without a contract with the NHIF, or payments not covered within the benefit package. Cost-sharing applies as a flat mandatory fee for visits to a GP, a specialist or a health diagnostic laboratory covered by the NHIF and for hospital stay⁽⁷⁹⁾. Cost-sharing also applies to outpatient medicines, except for treatment of chronic diseases.

In mid-March 2016 the Council of Ministers adopted amendments to the ordinance on the implementation of the right of access to medical care. It defines the terms and conditions under which the insured persons will be reimbursed by NHIF services. It forbids e.g. hospitals to ask additional payments from accompanying persons of children up to seven years of age, in case they stay in the hospital with their child. If the case requires extra care that the hospital cannot provide, children up to 18 years of age will be accompanied free of charge. In case of a need of hospitalisation, companions of disabled people who cannot be self-served will have the right for free of charge stay in the hospital.

⁽⁷⁹⁾ According to the new text in the Health Social Insurance Act, Art. 37, the amount of cost-sharing is not connected already to the minimum wage, but on yearly basis is defined by a Decree of the Council of Ministers.

In case of emergency, all patients have the right to be immediately admitted in hospital. Elective hospital admissions for the health insured are to be performed within two months. This period can only be prolonged on request of the patient or due to medical indications. The ordinance furthermore prohibits hospitals to require patients or their relatives to make any donations, i.e. informal payments, during the hospitalisation, as well as one month before it. The ordinance does not allow patients to pay extra for activities funded by the NHIF.

Types of providers, referral systems and patient choice

Primary care is provided by GPs working in private practices, group practices and in outpatient hospital departments. The citizens have free choice of GPs, whom they can change once every six months. GPs are being legally assigned the function of gatekeepers, referring patients to the specialists and hospitals. Facilities which provide specialised ambulatory care include individual or group practices for specialised medical care within: separate medical specialists; health care centres; diagnostic consultation centres (containing at least 10 physicians in various specialities); laboratory and image diagnosis centres; or individual medical and diagnostic or technical laboratories.

The density of physicians in Bulgaria exceeds the average density in the EU. In 2015, there were 405 practising physicians per 100,000 inhabitants, compared to 344 in EU. However, Bulgaria has a low number of general practitioners (62 per 100,000 inhabitants vs. 78 in 2015 in the EU). The number of nurses per 100,000 inhabitants (437 in 2015) is almost half the EU average of 833. The availability and quality of health services varies across the country and needs substantial improvements in non-urban areas. The ill-defined skill-mix together with an unequal distribution of physicians across the regions affects the provision and use of primary care, resulting in bottlenecks and limiting the effectiveness of the system and leading to strong inequities in access to health care, although patients can travel to nearby cities where access to care is easier.

Hospital care in Bulgaria is provided by public and private hospitals.

Similarly, to the number of physicians, hospital capacity exceeds EU averages. In 2015, the number of acute care beds was 601 compared to 402 per 100,000 inhabitants in the EU. The number of acute care beds is also increasing contrary to the general trend in the EU. The number for all hospital beds (incl. long-term care beds) in Bulgaria is also higher than the EU average (Bulgaria: 681; EU: 526 per 100,000 inhabitants). Further reducing hospital capacity, optimising bed occupancy rates and bed turnover rates, increasing the number of day case surgery and outpatient cases, and concentrating high-tech complex care in a few facilities (centres of excellence) are perhaps areas where further improvements can be made.

Treatment options, covered health services

There is a defined basket of services that has to be delivered to the whole population covered. An ordinance adopted by the Ministry of Health regulates the scope of the specific medical activities in the package paid with funds from NHIF. The outpatient care is included entirely in the basic package. For primary care the basic package includes provision of health information, promotion, prevention, diagnostics and therapeutic activities. They aim at completing the provision of necessary medical care and services and to protect and improve the health of patients and their families. The focus is put on health education about risk factors regarding socially significant illnesses and damages from unhealthy habits as well as on promoting positive health habits.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Health care providers are mainly reimbursed retrospectively on a per-case and per-capita basis. Actual payment rates are agreed in the contract with the NHIF beforehand.

Primary health care providers are reimbursed by the NHIF on a contractual basis according to the National Framework Contract. The contracts are based on monthly per-capita payments per insured person on the patient list. They also may include additional payments for additional procedures, such as preventive health, immunisation, regular medical check-up, dispensary treatment and observation. Moreover, those working in sparsely

populated and remote areas receive an additional per-capita remuneration combined with periodic balancing. Outpatient specialists are paid on a fee-for-service basis with different rates depending on the service provided.

Hospitals receive funding mainly through case-based payments (or payments per clinical pathway), based on a single flat rate per pathway combined with global budgets. The flat rate is calculated according to the cost of medical activities, auxiliary services provided to patients and up to two outpatient examinations following the patient's discharge. The terms, conditions and the procedure for monitoring, analysis and control on the implementation of medical care providers, as well as of the volumes and the total value of the services provided, have to be defined in the National Framework Agreement for Medical Activities. In case such an agreement is not concluded the decision is taken by the NHIF Supervisory Board.

A high share of public health care spending is spent on inpatient curative and rehabilitative care (48.5% in Bulgaria in 2015 versus 32% in the EU in 2015), while a low share of spending is allocated to outpatient care (12.4% in Bulgaria in 2015 versus 22.5% in the EU in 2015).

The institutions which are financed from the state budget (mainly state psychiatric hospitals and health and social care children's homes) follow different procedures and are paid per diem by the Ministry of Health.

The mechanisms for paying staff employed in inpatient care institutions vary according to the type of the institution and, generally, combinations of various payment methods are used. In the public inpatient sector, health personnel are mostly salaried and receive additional performance-related bonuses. In private hospitals, payment mechanisms are directly negotiable between the employer and the employees under labour contracts for different personnel categories.

The market for pharmaceutical products

Medicinal products subject to medical prescription and fully or partially paid by public funds are included in the Positive Drug List and their prices are formed using external and internal reference

prices. For external reference purposes, producer prices from 10 EU reference countries are used. If there are producer prices in those 10 reference countries, the rule is to set the price at the lowest price for the same medicinal product as listed in one of 7 additional EU reference countries.

According to the National Health Strategy 2014-2020, one of the key challenges in delivering quality, effective and affordable medicinal products is the design of mechanisms to stimulate rational use of medicinal products and the implementation of generic drug policy.

Use of Health Technology Assessments and cost-benefit analysis

The adopted amendments to the health insurance law in June 2015 initiated the following reforms. An obligatory centralised negotiation of the discounts paid by NHIF for innovative medicines and products for cancer treatment is introduced, as well as a mechanism for health technology assessment (HTA) for medicinal products.

The HTA process started in 2016 with the establishment of a special commission at the National Centre of Public Health and Analyses (NCPHA), a subordinate body of the Ministry of Health. HTA is to be carried out in the event of inclusion in the positive drug list of new innovative medicinal products. HTA aims to provide information about the safety, clinical effectiveness and efficiency, as well as on the budgetary, social, legal and ethical impacts of the application of medicinal products in healthcare.

However, an amendment of the Ordinance on the conditions, rules and procedure for regulation and registration of the prices of medicinal products, adopted by a Council of Ministers' Decree in January 2017, allows the inclusion of medicines with no evidence on clinical efficacy or cost-efficiency in the positive drug list. A decision to reimburse such medicines can be taken by the National Council on Prices and Reimbursement of Medicinal Products.

eHealth, Electronic Health Record

The use of information and communication technologies (ICT) is growing in the Bulgarian health system. The health portal of the National

Health Insurance Fund enables the insured persons to review their e-medical record online. The electronic service for reviewing the medical record is available to all citizens of the Republic of Bulgaria, who are (or were) health insured, as well as citizens of countries with which there are acting bilateral agreements can access the portal ⁽⁸⁰⁾.

Some other e-services provided by NHIF include checking for GPs that have contracted with NHIF and medicines paid by NHIF. Additionally, there are electronic submissions of reports from the inpatient care sector to NHIF, electronic daily registers of hospitalised and discharged patients, electronic checks of validity of health insurance cards, verification of health insurance status, etc.

Health promotion and disease prevention policies

Resources directed to prevention and health promotion policy are low due to the overall low level of health spending.

In early 2015, the government adopted a national response "Objectives for Health 2020" for implementation of the WHO strategic framework "Health 2020". This document formulates national goals in the field of improving the health status of the population as a factor for sustainable growth and defines long-term priorities of the country in the health sector. Based on the analysis of the health status of the population in Bulgaria, the concept defines several national health goals by 2020, including a reduction of child mortality, an improvement of the health status among the economically active groups and an increase in life expectancy. By the end of the same year ⁽⁸¹⁾, the National Health Strategy 2014-2020 that sets out the main goals of the health system until 2020 was adopted. The strategy and its action plan for implementation contain the priority policies and measures for addressing the increasing health challenges. Among these are equal treatment, the impact of the social determinants on public health

⁽⁸⁰⁾ Users may access this electronic service through <https://pis.nhif.bg/main/>. In order to access his/her e-medical record online the insured person should possess Qualified Electronic Signature or should obtain an Unique Access Code from his/her Regional Health Insurance Fund.

⁽⁸¹⁾ The National Health Strategy 2014-2020 was adopted by the National Assembly in December 2015 (publ. SG No. 101 from 2015).

and the main prerequisites for the functioning of the health system.

Bulgaria still has untapped potential to achieve better health of the population and prevent most of the diseases and premature mortality, respectively. There is a potential to increase the high levels of premature mortality by a stronger focus on health promotion and disease prevention policies, e.g. by changing unfavourable life styles.

Recently legislated and/or planned policy reforms

The strategic goals set out in the National Health Strategy 2014-2020 are based on the analysis of the health and demographic situation of the Bulgarian population. There are five national health priorities that focus the health policy on the sustainable improvement of the health of Bulgarian citizens in all age groups: 1) decrease of children's mortality at age 0-1 year to 6.8 per 1,000 live born; 2) decrease of children's mortality at age 1-9 up to 0.24 per 1,000; 3) decreasing of mortality of young and teenagers 10-19 years of age up to 0.28 per 1,000; 4) decreasing of mortality of economically active population – age 20-65 years to 4.19 per 1,000; 5) increasing of average length of life of people above 65 with 16.4 years.

With the latest amendments to the law on medical treatment facilities from December 2015, the National Assembly adopted the National Health Map, which allows determining and planning the needs of the population for health services access to outpatient and hospital care on geographical principles. The changes also provide for the formation of complex multidisciplinary centres for children with disabilities and chronic illnesses and people with rare diseases.

Since 2016, in accordance with the changes in the law on health insurance adopted in December 2015, NHIF applies new mechanisms for the implementation of control activities, to reduce opportunities for fraud and abuse in the health insurance system. NHIF employees together with controllers carry out unexpected controls over the execution of contracts with medical and / or dental care providers, pre-payment control of the provided medical and / or dental care services and ex-post control.

As many of the state-owned hospitals struggle with continuously persisting debts, in April 2018, the Ministry of Health enacted a compulsory tool to report and monitor financial management of state-owned hospitals. The tool is based on a set of requirements to the planning and accountability, investment policy, human resource management and public procurements; and on key performance indicators such as average length of stay, bed turnover, occupancy rate, liquidity ratios, net operating capital, debt to equity ratio, etc.

Challenges

The analysis above shows that a range of reforms have been implemented over the years to increase the efficiency in the sector while trying to improve the access to care. However, there may be room for improvements in a number of areas. The main challenges for the Bulgarian health care system are as follows:

- To guarantee the universality of health care coverage by implementing the mandatory health insurance subscription for permanent residents; to limit the size of out-of-pocket payments in total expenditure. This would contribute to reduce inequalities in access to and quality of health care.
- To improve the basis for more sustainable and efficient financing of health care in the future (e.g. considering additional sources of general budget funds), aiming at a better balance between resources and spending, as well as between the number of contributors and the number of beneficiaries. This can reduce the size of private payments and reduce inequalities in the access and quality of care and its distribution between population groups and regional areas.
- To continue to enhance and better distribute primary health care services to improve the effectiveness and efficiency of health care delivery. In the future, the effective implementation and usage of the recently deployed eHealth tools, including electronic patient records, can help ensuring effective referral systems from primary to specialist care and improving care coordination between types of care.

- To increase the primary care staff supply by implementing a comprehensive human resources strategy that adjusts the training of doctors to ensure a balanced skill-mix, that avoids staff shortages and that motivates and retains staff to the sector, especially in view of migration. In addition, consider enhancing financial and institutional incentives for GPs to provide adequate levels of services to patients based on quality indicators, performance-based reporting and payment bonuses.
- To increase health system efficiency by the shifting excessive capacity and activity of acute inpatient care towards ambulatory and outpatient care services, and strategically directing more resources towards providers of lower levels of care.
- To consider additional measures to improve the rational prescribing and usage of medicines, such as information and education campaigns, the monitoring of prescription of medicines and a more explicit policy on incentivising the uptake of generics. The policies could help improving population health, reducing the high level of out-of-pocket payments and improving access to cost-effective new medicines by generating savings to the public payer.
- To continue improving the systems for data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted. Promote the use of ICT in the gathering, storage, use and exchange of health information.
- To gradually increase the use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing.
- To foster public action in the area of health promotion and disease prevention on the basis of the defined public health priorities (diet, smoking, alcohol, lack of exercise) and given the recent pattern of risk factors.
- To operationalise, implement and adapt as needed the National Health Care Strategy (2014-2020), with a view of increasing ownership of the strategy by all stakeholders of the health system.

Table 2.3.1: Statistical Annex – Bulgaria

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	24	27	32	37	37	38	41	42	42	43	45	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	11.6	11.7	11.8	11.7	10.7	11.2	11.2	11.4	11.4	12.0	12.5	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	7.7	7.4	7.9	6.5	-3.1	2.0	4.5	0.6	1.4	1.9	4.3	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	1.2	6.6	9.0	0.5	6.9	6.4	-4.8	12.0	14.6	1.7	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	7.3	6.9	6.8	7.0	7.2	7.6	7.7	7.3	8.1	9.1	8.9	10.2	10.1	10.1	10.2
Total current as % of GDP	7.1	6.8	6.5	6.6	7.1	7.5	7.7	7.1	7.9	8.5	8.2	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.2	0.1	0.3	0.4	0.2	0.0	0.1	0.2	0.2	0.6	0.7	0.9	0.6	0.2	0.3
Total per capita PPS	501	543	645	762	799	863	956	925	1,030	1,185	1,232	2,745	2,895	2,975	3,305
Public total as % of GDP	4.6	3.9	4.0	4.1	3.9	4.4	4.3	4.2	4.3	5.1	4.9	8.0	7.8	7.8	8.0
Public current as % of GDP	4.3	3.8	3.7	3.7	3.8	4.2	4.2	4.0	4.1	4.5	4.2	7.7	7.6	7.6	7.8
Public total per capita PPS	312	311	375	450	433	499	530	531	545	664	675	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.28	0.15	0.31	0.41	0.08	0.20	0.12	0.20	0.23	0.58	0.66	0.2	0.2	0.2	0.2
Public as % total expenditure on health	62.3	57.2	58.1	59.1	54.2	57.8	55.5	57.4	52.9	56.0	54.8	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	11.8	14.2	13.4	10.7	11.5	12.4	13.2	13.1	14.8	13.0	13.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	:	77.0	77.0	88.2	:	:	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	38.9	42.7	42.6	42.6	44.4	43.1	44.5	47.7	47.2	45.8	47.7	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	7.7	7.6	7.6	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2	502.1	503.0	505.2	508.5
Life expectancy at birth for females	76.2	76.3	76.6	77.0	77.4	77.4	77.8	77.9	78.6	78.0	78.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	69.0	69.2	69.5	69.8	70.2	70.3	70.7	70.9	71.3	71.1	71.2	76.6	77.3	77.7	77.9
Healthy life years at birth females	:	71.9	73.9	65.7	65.9	67.1	65.9	65.7	66.6	66.1	65.0	62.0	62.1	61.5	63.3
Healthy life years at birth males	:	66.2	67.1	62.1	62.1	63.0	62.1	62.1	62.4	62.0	61.5	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	210	210	209	201	189	191	280	300	275	289	282	64	138	131	127
Infant mortality rate per 1 000 live births	10.4	9.7	9.2	8.6	9.0	9.4	8.5	7.8	7.3	7.6	6.6	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	2.9	2.6	2.5	2.7	:	:	:	:	2.5	2.6	2.4	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	0.3	0.4	0.4	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.0	0.9	0.8	0.8	:	:	:	:	1.1	1.1	1.1	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	2.4	2.5	2.3	2.3	:	:	:	:	3.3	3.4	3.3	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.1	0.1	0.2	0.1	:	:	:	:	0.0	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.3	0.3	0.3	0.3	0.3	:	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.2	:	0.1	0.1	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.5	2.2	2.2	2.3	:	:	:	:	2.1	2.2	2.1	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	:	:	:	:	0.3	0.4	0.4	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.6	0.5	0.5	0.5	:	:	:	:	0.5	0.5	0.5	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.5	0.5	0.5	0.4	:	:	:	:	0.7	0.8	0.7	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.0	0.0	0.0	:	:	:	:	0.0	:	:	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.3	0.2	0.3	0.3	:	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.2	:	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.3.2: Statistical Annex - continued – Bulgaria

Composition of total as % of total current health expenditure												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	40.3%	39.1%	39.1%	41.2%	:	:	:	:	31.7%	30.7%	29.4%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	3.3%	4.8%	4.6%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	13.6%	12.9%	12.9%	12.4%	:	:	:	:	13.6%	13.2%	13.5%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	34.3%	36.8%	35.2%	35.3%	:	:	:	:	42.4%	40.2%	40.7%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	1.1%	1.6%	2.6%	1.5%	:	:	:	:	0.0%	2.5%	2.8%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	3.1%	3.6%	4.0%	4.4%	3.5%	4.2%	3.8%	:	2.7%	2.6%	2.6%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.4%	1.5%	1.2%	1.1%	1.4%	1.3%	2.0%	:	1.4%	1.4%	1.3%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	58.8%	58.8%	58.9%	61.2%	:	:	:	:	51.1%	49.2%	48.9%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	:	:	:	:	6.4%	9.1%	9.1%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	13.3%	12.9%	12.9%	12.4%	:	:	:	:	13.8%	12.0%	12.4%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	12.6%	13.7%	12.9%	11.6%	:	:	:	:	16.5%	17.3%	16.2%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	0.0%	0.0%	0.0%	0.0%	:	:	:	:	0.0%	:	:	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	4.7%	5.5%	6.6%	7.3%	6.0%	6.7%	6.5%	:	4.4%	4.2%	4.5%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	2.6%	2.6%	2.2%	1.9%	2.6%	2.4%	3.6%	:	2.7%	2.7%	2.6%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.27	0.31	0.31	0.31	0.40	0.42	0.63	0.74	0.73	0.71	0.71	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.6	0.6	0.7	0.7	:	:	1.0	1.0	1.1	1.1	1.1	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.6	1.7	1.9	2.2	2.7	3.0	2.9	3.2	3.4	3.4	3.4	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	:	:	:	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	11.5	:	:	:	:	:	14.4	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	:	39.7	29.2	:	:	:	:	:	27.3	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	10.5	10.4	10.9	11.0	10.9	10.8	10.7	11.0	12.1	12.0	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	364	365	364	360	369	375	386	391	398	399	405	324	330	338	344
Practising nurses per 100 000 inhabitants	404	410	421	424	421	426	430	439	447	442	437	837	835	825	833
General practitioners per 100 000 inhabitants	68	67	65	63	65	64	64	67	63	63	62	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	5.4	5.4	5.4	5.4	5.4	5.4	5.4	:	:	5.9	5.9	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	20	20	21	22	23	25	26	27	30	32	31	17	16	16	16
Day cases discharges per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	:	:	7.2	6.8	6.5	6.1	6.0	5.8	5.6	5.4	5.3	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	:	:	:	:	:	:	:	:	:	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.6	5.6	5.5	5.4	5.2	Bulgaria	EU	
AWG risk scenario	5.0	5.3	5.6	5.9	6.1	6.3	6.5	6.6	6.6	6.5	6.4	6.3	0.3	0.9	
													1.3	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	7.2	7.0	6.7	6.4	6.2	5.9	5.7	5.6	5.4	5.2	5.0	4.9	Bulgaria	EU	
													-31.9	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.4. CROATIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

Croatia, member of the European Union since 2013, has a population of almost 4.2 million inhabitants, which is roughly 0.8% of the EU population. In the absence of any sizeable immigration and a decline in fertility, the population of Croatia is steadily decreasing. In the period from 2016 to 2070 a decrease of 19% can be expected, based on the population forecast of Eurostat, leading to a population of 3.4 million in 2070.

In current prices the GDP of Croatia has been increasing fast from 2005 to 2008, from €37 to €48 billion. Since 2008 it decreased to €43 billion in 2013 and has remained roughly stable at a lower level since then (€44 billion in 2015). GDP per capita was in 2015 with 16,500 PPS well below the EU average of 29,600 PPS.

Total and public expenditure on health as % of GDP

Total health expenditure was at 7.7% of GDP in 2015, lower than the EU average of 10.2%. Total public expenditure on health as a percentage of GDP (6.0%) remains under the EU average (8.0%). Looking at health care without long-term care⁽⁸²⁾ reveals a similar picture with public spending below the EU average (5.7% vs 6.8% in 2015). At the same time, the share of health in public expenditure is with 13.4%, recorded in 2015, of total government expenditure, close to the EU average of 15%. With some 77.7% the share of public expenditure in total expenditure on health was in 2015 also at the EU average of 78.4%.

When expressed in per capita terms, total spending on health at 1,151 PPS in 2015 was significantly below the EU average in the same year (3,305 PPS). So is public spending on health: 895 PPS in

⁽⁸²⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

2015 vs. an average of 2,609 PPS in the EU in 2015⁽⁸³⁾.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.7 pps of GDP, slightly below the average growth level expected for the EU of 0.9 pps of GDP, according to the "AWG reference scenario"⁽⁸⁴⁾. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 1.5 pps of GDP from now until 2070 (EU: 1.6 pps). Overall, the country faces no fiscal risks in the short-run and medium risks in the medium and long-term⁽⁸⁵⁾.

Health status

Life expectancy at birth for both women and men is respectively 80.5 years and 74.4 years and is, although having increased during the decade, below the EU average (83.3 and 77.9 years respectively). Similarly, healthy life years at birth for both sexes are with 56.8 years (women) and 55.3 years (men) lower than the EU average (63.3 and 62.6, respectively). Infant mortality has gradually declined to 4.1 per 1,000 live births in 2015, but is still higher than the EU average of 3.6.

System characteristics

Overall description of the system

Since 1990, Croatian health care went through a series of reforms that have helped to transform the once fragmented and highly decentralised health system, inherited from former Yugoslavia and battered by five years of war, into a health care system that maintains the principles of universality and solidarity.

The system of health care in Croatia is based on mixed financing (with predominant public

⁽⁸³⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to Eurostat data series, which reflect current expenditure only.

⁽⁸⁴⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁸⁵⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

financing, nearly 78% in 2015) and provision by public and private health services providers. Health care is financed from mandatory contributions (approximately 91%) as well as from taxes, co-payments and private insurance. Also a share of compulsory car insurance premiums is part of the healthcare budget.

Health care is contracted by the Croatian Health Insurance Fund (HZZO), counties (20) and the City of Zagreb, and beneficiaries. The contribution rates for the mandatory health insurance are 15% of gross salary ⁽⁸⁶⁾ and an additional special contribution of 0.5% of gross salary for injuries and occupational diseases. Since 2015, the Croatian Health Insurance Fund is separated from the State Treasury and is functioning as an extra-budgetary fund.

Two basic rights arising from the compulsory basic health insurance include in-kind benefits (right to health protection) and cash benefits (e.g. compensation for sick leave, travel expenses ⁽⁸⁷⁾, etc).

Coverage

The average number of insured persons in 2015 was 4,325,852, however, only 33% of the insured (1,446,654 persons) contributed the full premium of 15% of gross salary ⁽⁸⁸⁾. While it is estimated that only 1/3 of the population is liable to pay health care contributions, the remaining population includes pensioners (who pay a reduced healthcare premium depending on their pension), insured persons' family members, unemployed (health contribution 5% of the prescribed base amount, paid from the state budget) and other inactive persons.

⁽⁸⁶⁾ In order to boost the competitiveness of the economy, the healthcare insurance contributions were lowered from 15% to 13% in 2012, though this measure was revoked in 2014 with Act on Amendments of the Contributions Act, OG, No. 41/14.

⁽⁸⁷⁾ Insured persons are entitled to claim reimbursement of travel expenses if they used health services at a contracted health facility or physician which is more than 50 km distant from their residence, provided they are not able to obtain the same treatment in the place of their residence. However, complicated rules of reimbursement do not allow for a full reimbursement of costs in all cases.

⁽⁸⁸⁾ Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjescje_o_poslovanju_hzzo_za_2015_godinu.pdf.

From the share of the population paying the full healthcare insurance contributions in 2015, 47% (685,988) were women and 53% (780,666) persons were men. Furthermore, 1,061,553 pensioners were registered in 2015. The number of farmers was 21,845 ⁽⁸⁹⁾. Other categories of insured (which comprises the unemployed, insured abroad - pensioners, students and high school students, persons incapable of independent life and work, etc.) marked an yearly increase by 29.4% in 2015 ⁽⁹⁰⁾.

Administrative organisation and revenue collection mechanism

Contributions are paid on a monthly contribution base, which represents the salary or other income from employment paid by employer and subject to income tax or income from self-employment, which is calculated as the product of monthly contribution base and a coefficient depending on the nature of self-employment. Health contributions on pensions above the average net wage amount to 3%.

In 2008, the efficiency of the sector was increased through the introduction of public procurement of medication, centralised procurement of medical equipment, better supervision of transfers to households, reorganisation of emergency medical services, use of eHealth tools in primary health care and introduction of national waiting lists. Diagnoses related groups (DRGs) replaced the unpopular payment per therapeutic procedure (PPTPs) in 2009 and allowed for more refined case-groupings.

Role of private insurance and out of pocket co-payments

Patients have to pay co-payments for medicines, which are on a complementary list of medicines, even if they have complementary insurance. Complementary insurance is a voluntary insurance. Patients without complementary health insurance

⁽⁸⁹⁾ Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjescje_o_poslovanju_hzzo_za_2015_godinu.pdf.

⁽⁹⁰⁾ Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjescje_o_poslovanju_hzzo_za_2015_godinu.pdf.

have to pay additional fixed amount of HRK 10 (€1.50) per prescription and HRK 10 (€1.5) for a GP visit. They also have to pay 20% of hospital expenditures with the maximum amount of approximately €260 per invoice (for treatments, medical tests, hospital bed).

With the Healthcare Reform of 2008, the share of the population excluded from paying co-payments was reduced. At the same time, the HZZO offered a voluntary complementary health insurance (CHI), which could cover these co-payments (Voncina, 2012). Complementary health insurance may be provided by HZZO or by private insurers.

The total number of insured persons by HZZO for complementary health insurance was 2,597,831 in 2015. From them, as many as 1,623,799 paid the complementary health insurance policy by themselves. For about 974,032 insured persons, the costs of complementary health insurance policy were covered from the state budget (these categories include persons with 100% disability, organ donors, blood donors, pupils and students under 26 years, as well as persons below the minimum income threshold) ⁽⁹¹⁾.

HZZO provided the complementary health insurance at a yearly loss of 23 million euro in 2012. Nevertheless, the HZZO reduced the price of complementary health insurance policy to HRK 70 (€9) for all insured persons in September 2013. With this measure, HZZO hoped to retain the majority of 2,370,000 insured persons and beat the competitors in the market. The largest private insurer in Croatia, *Osiguranje*, offered their complementary health insurance policies at a price of HRK 75, and with the opening of the market after Croatia joined the EU; additional private insurance companies have announced their interest in this segment. HZZO is currently holding around 98% of the market in complementary health insurance (Bodiroga-Vukobrat, 2013).

Private voluntary supplementary insurance plays a minor role in Croatia, with about 1.2% of the

⁽⁹¹⁾ Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjesce_o_poslovanju_hzzo_za_2015_godinu.pdf.

population holding a private supplementary health insurance policy ⁽⁹²⁾.

Types of providers, referral systems and patient choice

The number of practising physicians per 100,000 inhabitants (319 in 2015) is slightly below the EU average (344 in 2015), showing an increase since 2005 (250). The number of GPs per 100,000 inhabitants (55 in 2015) is below the EU average (78 the same year), and has remained roughly stable since 2009. The number of practising nurses per 100,000 inhabitants (583 in 2015) is well below the EU average (833) despite having increased throughout the decade, from a level of 483 in 2005 ⁽⁹³⁾.

Teaching hospitals, clinical hospital centres and state institutes of public health are state owned. Health centres, polyclinics, general and special hospitals, pharmacies, institutions for emergency medical aid, home care institutions and county institutes of public health are county-owned. In 2002, health centres started merging and number decreased from 120 in 2001 to 49 in 2014. Out of 73 hospital institutions and sanatoria, 10 special hospitals and 5 sanatoria were privately owned. By the end of 2014, there were 5,399 private practice units (doctors' offices, laboratories, private pharmacies, private physical therapy practices and home care services) registered ⁽⁹⁴⁾. The majority of primary health care general practitioner (GP) offices located in health centres were since 1991 privatised, and the remaining ones were left under county ownership (Bodiroga-Vukobrat, 2013).

Treatment options, covered health services

As the main purchaser of health services, the HZZO also plays a key role in the definition of basic health services covered under statutory insurance, the establishment of performance

⁽⁹²⁾ The 1993 Law allowed opting-out of the public insurance system and acquiring substitutive insurance with private insurers. This was abolished in 2002.

⁽⁹³⁾ Data for density of health personnel is taken from the OECD database. As this figure includes only nurses employed in hospitals, the actual number may be underestimated.

⁽⁹⁴⁾ Croatian Institute of Public Health, Croatian Health Service Yearbook 2014, http://www.hzjz.hr/wp-content/uploads/2015/05/ljetopis_2014.pdf.

standards and price setting for services covered by the HZZO (Vončina et al., 2006).

With 1.8 hospitals and 358 acute hospital beds per 100,000 inhabitants in 2015, Croatia is in line with older EU Member States and does not have excess hospital facilities like many other countries in Central and Eastern Europe. However, the Croatian hospitals have inadequate medical technology and equipment. Comparing the number of MRI scans, mammograms and CT scans per 100,000 inhabitants reveals that Croatia is in the lower ranking within the EU. In addition, regional coverage varies and regional differences persevere, since many capacities are unequally distributed and concentrated in metropolitan areas (Bodiroga-Vukobrat, 2013).

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Since 2015, all hospitals and primary care providers are financed from the HZZO budget. The treatment of acute patients is paid to clinical medical institutions according to diagnostic-therapeutic groups (DTS), or according to day of clinical (hospital) treatment (DBL) for chronic diseases. Additional coverage is provided for particularly expensive medicines and certain complicated procedures. In the year 2015, 24,069 beds have been contacted, of which 12,617 are for acute care, 1,324 for long-term care, 6,357 beds for chronic diseases and 3,771 day care beds. The average monthly hospital limit in 2015 was HRK 664,907,700 (€8,981,231), which increased from HRK 576.5 million in 2014 ⁽⁹⁵⁾.

In 2015, the average number of waiting days for all diagnostic procedures was 147 with 178,344 orders waiting (decreased from 166 with 189,540 orders in 2014); the average number of days for therapeutic procedures was 253 with 42,791 orders (down from 267 with 44,822 in 2014), and the average number of days for first examination was 102 with 128,847 orders (lower than 111 with 125,236 orders recorded the previous year).

⁽⁹⁵⁾ Network of Public Health Services (Official Gazette, No 101/12, 31/13, 113/15, 20/18). Depending on the structure, the majority of hospital expenses are spent on wages (57% in 2011).

In 2015, there were 76 hospital institutions and treatment centres in Croatia: 5 clinical hospital centres, 8 clinical hospitals and clinics, 20 general hospitals, 32 special hospitals and treatment centres, 1 hospice, 9 general wards and 1 out-of-hospital maternity ward.

In 2015, Croatian hospitals treated 748,159 people. The care included also hospital stays for childbirth, abortion, and hospital rehabilitation. According to individual reports on treated patients (excluding childbirth, abortions and rehabilitation), the number of patients treated in Croatian hospitals in 2015 was 589,215.

The number of beds (expressed per 100,000 population) in all hospital-type institutions in 2015 was 583. By bed structure per 100,000 inhabitants in 2015, there were 362 acute beds (154 in general hospitals and 225 in teaching hospitals). For chronic and sub-acute patients, 189 beds per 100,000 inhabitants were available.

In Croatian hospitals, in 2015 there were 6,401,804 days of hospital treatment. In other words, the hospital average length of stay was 8.6 days (against 15.4 days in 1990, but still higher than the EU average of 7.6 days in 2015) ⁽⁹⁶⁾.

It is recognised that a reduction of existing inefficiencies in hospital management is required in the short-run in order to decrease the debt and arrears of hospitals. Reconsidering the model of financing of hospitals seems inevitable in the long run. To this end, the Hospital Master Plan, which is the National plan of development of clinical hospital centres, clinical hospitals and general hospitals in Republic of Croatia for 2015-2016, has come into force in March 2015 ⁽⁹⁷⁾. The World Bank supported the preparation of the plan, and provided funds to hire French consultancy firm *Conseil Santé* to assist with the writing of the plan.

⁽⁹⁶⁾ Average length of stay in general hospitals has been reduced from 12.3 days in 1990 to 6.68 days in 2015. The average length of stay in teaching hospital centres, teaching hospitals and clinics was reduced from 12.05 to 6.86 days and in special hospitals from 34.83 to 24.83 days in the same period. Source: Croatian Institute of Public Health, Croatian Health Service Yearbook 2014, http://www.hzjz.hr/wp-content/uploads/2015/05/ljetopis_2014.pdf.

⁽⁹⁷⁾ http://narodne-novine.nn.hr/clanci/sluzbeni/2015_03_26_544.html.

The market for pharmaceutical products

Croatia spent 26% of total current health expenditure for outpatient pharmaceuticals and medical goods in 2015, almost as much as for inpatient care. In 2011, there were 16 licensed pharmaceutical manufacturers in Croatia. Domestic manufacturers held 20% of the market share by value produced and 33% by volume produced (Ministry of Health and Social Welfare, 2011). The major domestic pharmaceutical companies are Pliva, Belupo and JadranGalenskiLaboratorij.

The HZZO is a purchasing monopoly. It controls drug prices and it has enforced price reductions in the market. The access of new drugs to the market used to take two to three years. However, the 2003 Drugs Law introduced a new Agency for Drugs and Medical Products and set out a shorter, more ambitious time frame for registration (210 days for ready-prepared drugs).

The Drug Reference Price System was introduced in 1999 in an attempt to contain pharmaceutical expenditure. To further rationalise costs for drugs, the HZZO has introduced risk-sharing, pay-back and cross-product agreements with pharmaceutical companies. In addition, according to the new model, whenever both an off-patent and a generic are available, generics are preferred, unless there are specific medical indications to the contrary (Vončina, 2006).

To curb the volume of prescriptions, the HZZO has imposed annual caps on the number of prescriptions per beneficiary and limited the number of drugs per prescription, which, however were not successful as the number of prescriptions actually increased over time. The HZZO reviews prescribing practices but does not include them as part of performance indicators for payments. Overspending by individual GPs is, however, subject to financial punishment of up to 10% of monthly capitation. The punishments are enforced (Vončina, 2006).

Pharmaceuticals covered by the HZZO are classified into two lists: the positive list covered entirely by HZZO, and the supplementary list with medicines covered partly by HZZO and partly by OOP payments. Medicines are free of charge if they are on the positive list, regardless of the

patient's situation (age, financial status, inpatient or outpatient setting, etc.). There is a prescription fee for all reimbursable medicines of HRK 10 (approximately €1.5) per prescription. Private health insurance schemes do not cover medicines.

Use of Health Technology Assessments and cost-benefit analysis

In accordance to the Act on Quality of Health Care and Social Welfare (Official gazette, no 124/11), the Agency for Quality and Accreditation in Health Care and Social Welfare is in charge of health technology assessment (HTA). However, the use of HTA is optional and not mandatory, a circumstance leading to HTA being rather underused and underdeveloped in Croatia. The World Bank identifies HTA and the use of protocols as a field for improvement (Bodiroga-Vukobrat, 2013).

The HZZO is playing a big role in HTA decisions and, through its "Drugs Committee" and "Medical Devices Committee", is responsible for appraisals and recommendations to the Board of the HZZO. The Board of HZZO makes then the pricing and reimbursement decisions. The HZZO can make a request to the Agency for Quality and Accreditation in Healthcare and Social Welfare – HTA Department to conduct an assessment. The Ministry of Health is involved in the HTA process, when it comes to legislation. As a member state, Croatia is also taking part in EUnetHTA and is represented in some of the work groups of the network.

eHealth, Electronic Health Record

The Croatian Government aims at improving, modernising and maintaining the existing information systems in health care. Information and eHealth strengthening is the first priority identified in the 2012-2020 National Health Care Strategy. The aim is to integrate and standardise health information, to further establish Electronic Health Records, to improve the use of statistical information to support decision-making and to introduce a reporting and warning system.

Health promotion and disease prevention policies

The Government of Croatia confirms in the National Health Care Strategy 2012-2020 the need to strengthen disease prevention. Therefore, it has committed to increase gradually the share of preventive programmes and activities in the healthcare budget. The primary focus in prevention must be on the biggest health problems of the Croatian population – chronic non-infectious diseases, malignant tumours, injuries, mental disorders and risk behaviours, including smoking, misuse of alcohol and drugs, physical inactivity and poor nutritional habits. The broad ambitions of the government would need to be translated in to concrete actions.

Recently legislated and/or planned policy reforms

The focus of reforms implemented between 2006 and 2013 was on the financial stabilisation of the health care system. The key reform, implemented between 2008 and 2011, contained a number of measures: diversification of public revenue collection mechanisms through the introduction of new mandatory and complementary health insurance contributions; increases in co-payments; and measures to resolve accumulated arrears. Other important reforms included changes in the payment mechanisms for primary and hospital care; pharmaceutical pricing and reimbursement reform; and changes to health care provision (e.g. emergency care reform).

The launch of many of these reforms was not difficult, as for many of them policy options were not publicly discussed and no comprehensive implementation plans were developed. However, as a result, many of them soon faced serious implementation problems and some were only partially implemented.

Planned reform activities for 2014–2016 were mainly directed at achieving cost-effectiveness in the hospital sector ⁽⁹⁸⁾.

⁽⁹⁸⁾ Republic of Croatia has regulated healthcare by *Health Care Protection Act* ("Official Gazette", 150/08, 71/10, 139/10, 22/11, 84/11., 12/12, 35/12,70/12, 82/13, 22/14, 13/17), *Compulsory Health Insurance Act* ("Official

Based on the National Reforms Programme for 2016 adopted by the Croatian Government in April 2016, spending control, rationalisation and optimisation of costs should ensure a high level of health protection. This should be achieved through changes of the health insurance system, through a reform of emergency care, the reorganisation of the hospital network, the rationalisation and reorganisation of hospital non-medical services, a reform of primary health care, further development and implementation of the joint public procurement procedure, and through the stricter control of drug prescriptions and the informatisation of the health system ⁽⁹⁹⁾.

Gazette" No. 80/13, 137/13) and *Voluntary Health Insurance Act* ("Official Gazette", 85/06, 150/08, 71/10).

Health Protection Act: regulates principles and procedures of health care, rights and obligations of persons in the use of health care services, social welfare holders for population health, content and organisational forms of health activities and supervision of the performance of health care activities.

Compulsory Health Insurance Act: regulates compulsory health insurance in the Republic of Croatia, the scope of the right to health care and other rights and obligations of the insured persons, acquiring and financing terms and manners of, as well as rights and obligations of compulsory health insurance, including the rights and obligations of the contracting entities for the implementation of health care from the compulsory health insurance. Under this Act the Directive 2011/24/EC of the European Parliament and of the Council of 9 March 2011 is transposed into national legal system and the application of patients' rights in cross-border healthcare (OJ L 88, 2011).

Voluntary Health Insurance Act: regulates types, conditions and manners of implementation of voluntary health insurance (voluntary, supplementary and private health insurance).

National Strategy for the Development of Health (2012-2014) sets the direction of development of the Croatian Health Care ("Official Gazette" No. 116/12), and laws governing the conduct of certain medical procedures. All those laws include provisions of the acts of the European Union, such as Transplantation of Human Organs for the Purpose of Medical Treatment Act ("Official Gazette" No. 144/12), Medically Assisted Reproduction ("Official Gazette" No. 86/12), Application of Human Tissues and Cells Act ("Official Gazette" No. 144/12).

The organisation itself, as well as conditions for carrying out certain health activities are regulated by following laws: *Medical Practice Act* ("Official Gazette", no. 121/03 and 117/08), *Medical-Biochemical Activities Act* ("Official Gazette" No. 121/03 and 117/08), *Dentistry Act* ("Official Gazette", 121/03, 117/08, and 120/09), *Pharmacy Act* ("Official Gazette", 121/03, 35/08, and 117/08), *Nursing Act* ("Official Gazette", 121/03, 117/08, 57/11). Health care in the Republic of Croatia is also regulated by other regulations which are adopted under the basis of the specified laws.

⁽⁹⁹⁾ National Reforms Programme for 2016, <https://vlada.gov.hr/UserDocsImages/Sjednice/2016/17%20sjednica%20Vlade/17%20-%201a.pdf>.

Joint hospital procurement

While initially the health care sector remained largely unaffected by the austerity measures implemented in response to the financial crisis, since 2012, it faced more pressure to rationalise health care costs. One of the measures considered to have the potential to achieve significant savings was the implementation of a joint hospital procurement programme for public hospitals.

Public hospitals, which previously procured all medical products and other goods individually, were directed to form joint purchasing bodies for items that account for the largest share of expenditure, such as medicines, medical devices and energy. A decentralised approach was adopted, whereby a number of hospitals were assigned to procure categories of goods for all participating hospitals. Hospitals that had previously achieved best value for money for certain procurement categories were selected to be the central purchasers. Central procurement was launched for 15 groups of goods and services in October 2012.

Despite substantial opposition from manufacturers and retailers, a number of joint procurement tenders have been successfully concluded. So far, the reform is proving to be successful in reducing prices and achieving savings, and in standardising the quality of procured goods.

'Sanation' of public hospitals

The problem of poor hospital finances has persisted over many years and in the last 15 years there were more than 10 cases where hospitals had to be financially reorganised in the short term (Bodiroga-Vukobrat, 2013). In 2012, the Act on Sanation of Public Institutions⁽¹⁰⁰⁾ was adopted, mainly with the aim of improving the finances of heavily indebted county-owned hospitals. It enabled temporary centralisation of the hospital management, and it was conceived as one of the measures aimed at reducing the overall public debt and improving the efficiency of the public sector (measures were also undertaken in other sectors).

In April 2013, the government adopted decisions on the financial reorganisation of nine state-owned

⁽¹⁰⁰⁾ The word "sanation" in the context of the Croatian health care system means restoring a sound financial position and improving management.

clinical hospitals at a cost of HRK 1.9 billion (€250 million) and an additional 25 health care facilities (mostly county-owned hospitals) at a cost of HRK 1.13 billion (€150 million) (Bodiroga-Vukobrat, 2013). The measure was to be applied to all hospitals whose expenditure exceeded revenues at the end of 2013. During 2013 and 2014 total amount of debt settlement was HRK 3.5 billion (€461 million)⁽¹⁰¹⁾. However, both the hospitals and the HZZO continued to generate new arrears, while at the same time both the State budget for health care and co-payments have been reduced. Problems with poor hospital management also persist due to the political designation of hospital directors and managers.

In 2017, the government allocated approximately €13.3 million to settle arrears of state-owned hospitals. The amount received by each hospital was determined by the Ministry of Health, taking into account the amount of debt and how long it has been overdue and various parameters of hospital activity. The same amounts are to be allocated in 2018 and 2019. Hospitals must submit, within seven days of receiving funds, a report on the use of funds and show evidence that funds were spent on debt settlement⁽¹⁰²⁾.

Other reforms

Some of the reforms that were introduced between 2006 and 2013 were encouraged by previous experiences (for example, the introduction of a prospective case-adjusted hospital payment system, based on DRGs, was encouraged by evidence on efficiency gains reported since the implementation of the payment per therapeutic procedure (PPTP) schedule in 2005) (Bodiroga-Vukobrat, 2012), however, most of the measures had not been tested before.

The Government Programme for the 2011–2015 Mandate recognised that citizens have over the years become increasingly burdened with health care financing and the focus has been shifted to patient-oriented health policy, maintaining solidarity between the healthy and the ill, the rich

⁽¹⁰¹⁾ Source: <https://vlada.gov.hr/UserDocsImages/Sjednice/2016/272%20sjednica%20Vlade/272%20-%201.pdf>.

⁽¹⁰²⁾ Source: <https://vlada.gov.hr/UserDocsImages/Sjednice/2017/12%20prosinac/73%20sjednica%20VRH/73%20-%202013.pdf>.

and the poor, and the young and the elderly. This was to be achieved through a number of measures, such as the reorganisation of emergency medical care, primary health care and hospitals; education of human resources; more emphasis on preventive measures; and the shortening of waiting lists.

The large number of changes that have been introduced and the speed of their implementation have resulted in insufficient preparation of some measures, delays and problems with implementation. Nevertheless, several reforms (the pharmaceutical pricing and reimbursement reform; the 2013 payment mechanisms reform; and also the EMS reform) seem to have been successfully implemented.

According to the Hospital Master Plan, in 2015 reorganisation of hospitals was initiated. In the last quarter of 2015, the Network of Public Health Services was changed which implied a reclassification of hospitals beds from acute beds to palliative, chronic, prolonged and day-care beds. The full implementation of the Master Plan, including the reshaping of the hospital network, has started by the end of 2016 ⁽¹⁰³⁾.

As part of the 2017 National Reform Programme, adopted by the Government ⁽¹⁰⁴⁾, is the continuation of reform activities directed at the reduction of healthcare debts and sustainability of the healthcare system was established. The reform activities continue to focus on establishing a functional integration of hospitals, increased efficiency and quality of healthcare services, development and implementation of human resource management policy in healthcare, rationalisation and reorganisation of non-healthcare services in hospitals, further enforcement of strict controls of prescribing medicines, unified public procurement and computerisation of the system, improving primary health care and palliative care, and increasing the number of complementary health insurance users.

⁽¹⁰³⁾ Source: Convergence Program of Republic of Croatia for 2016-2019, <https://vlada.gov.hr/UserDocsImages/Sjednice/2016/17%20sjednica%20Vlade/17%20-%201b.pdf>.

⁽¹⁰⁴⁾ Resolution, Class No. 022-03 / 17-07 / 47, Reg. No. 50301-25 / 05-17-3 dated April 27, 2017.

Challenges

A range of reforms have been implemented in recent years – or are still in the state of gradual implementation. They imply substantial structural changes, with a focus on controlling the growth of health expenditure and improving efficiency and quality. The main challenges for the Croatian health care system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades. To this end, to strengthen the existing public procurement system.
- To improve the basis for more sustainable and efficient financing of health care (e.g. considering additional sources of general budget funds), aiming at a better balance between resources and spending, and diminishing the reliance on retroactive government transfers to cover deficits by health care providers and of regressive financing.
- To increase efficiency in hospital productivity by adjusting the way providers are remunerated, including staff wages, thereby containing the issue of deficits and arrears, the elimination of which is lagging behind. To this end, to further the efforts in the introduction of activity-based systems as a driver of cost-efficiency.
- To explore how current financing schemes could be adjusted to a mix of capitation-based reimbursement and of activity/quality linked incentives, to increase efficiency and quality in the delivery of services at all levels of care (primary and specialist care) and notably to encourage more health promotion and disease prevention activities (e.g. vaccination).
- To optimise the configuration of the hospital system (including capacity, staff and service mix) to tackle existing regional differences and obstacles to access to services. To design and implement a policy of human resources management based on improved training and on achieving a skill mix consistent with a primary-care based system.

- To improve data collection, especially in some crucial areas such as resources and care utilisation; to improve the patient information system promoting the development and utilisation of e-health tools as envisaged by the 2012 National Health Care Strategy, which can help ensuring effective referral systems from primary to specialist care and improving care coordination between types of care.
- To consider additional measures to improve the rational prescribing and usage of medicines, such as information and education campaigns, the monitoring of prescription of medicines and a more explicit policy on incentivising the uptake of generics. The policies could help improving population health, reducing the high level of out-of-pocket payments and improving access to cost-effective new medicines by generating savings to the public payer.
- To gradually increase the use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing, increasing the use of HTA currently underused and underdeveloped, possibly making it a compulsory step and strengthening the role of the Agency for Quality and Accreditation in Health Care and Social Welfare.
- To further enhance health promotion and disease prevention activities, promoting healthy life styles and disease screening given the most recent pattern of risk factors (such as, for instance alcohol consumption).
- Implementing the Health Care Strategy (2012-2020), with a view of increasing ownership of the strategy by all stakeholders of the health system.

Table 2.4.1: Statistical Annex – Croatia

General context												EU- latest national data			
GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP, in billion Euro, current prices	37	40	44	48	45	45	45	44	43	43	44	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	15.4	16.4	17.4	17.0	15.3	15.1	15.4	15.5	15.4	15.6	16.5	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	4.1	4.8	5.1	2.1	-7.3	-1.2	-0.1	-1.8	-0.4	0.3	3.3	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	5.7	11.7	5.0	-1.9	-1.4	-15.3	-2.5	7.9	0.5	0.9	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	7.4	7.4	7.9	8.1	8.6	8.6	7.3	7.2	7.8	7.8	7.7	10.2	10.1	10.1	10.2
Total current as % of GDP	6.9	7.0	7.4	7.7	8.2	8.3	7.8	7.8	7.3	7.5	7.4	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.5	0.5	0.5	0.4	0.4	0.3	-0.5	-0.6	0.5	0.4	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	899	998	1,159	1,307	1,296	1,293	1,092	1,070	1,150	1,144	1,151	2,745	2,895	2,975	3,305
Public total as % of GDP	6.4	6.5	7.0	6.9	7.4	7.4	5.9	6.0	6.1	6.2	6.0	8.0	7.8	7.8	8.0
Public current as % of GDP	5.9	6.0	6.5	6.5	7.0	7.1	5.5	5.6	5.9	5.8	5.7	7.7	7.6	7.6	7.8
Public total per capita PPS	778	871	1,021	1,114	1,118	1,120	883	881	903	900	895	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.48	0.49	0.47	0.43	0.42	0.34	0.36	0.35	0.29	0.36	0.30	0.2	0.2	0.2	0.2
Public as % total expenditure on health	86.6	87.2	88.1	85.2	86.3	86.6	80.8	82.4	78.5	78.7	77.7	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.0	14.2	14.6	13.4	12.8	13.0	13.6	13.6	13.2	13.3	13.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	:	100.0	100.0	:	:	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	13.4	13.4	12.5	14.5	13.7	13.8	13.4	12.8	12.1	15.0	15.2	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	502.1	503.0	505.2	508.5
Life expectancy at birth for females	78.8	79.3	79.2	79.7	79.7	79.9	80.4	80.6	81.0	81.0	80.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	71.7	72.4	72.2	72.3	72.8	73.4	73.8	73.9	74.5	74.7	74.4	76.6	77.3	77.7	77.9
Healthy life years at birth females	:	:	:	:	:	60.4	61.7	64.2	60.4	60.0	56.8	62.0	62.1	61.5	63.3
Healthy life years at birth males	:	:	:	:	:	57.4	59.8	61.9	57.6	58.6	55.3	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	149	142	144	136	132	125	226	216	206	207	216	64	138	131	127
Infant mortality rate per 1 000 live births	5.7	5.2	5.6	4.5	5.3	4.4	4.7	3.6	4.1	5.0	4.1	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	:	:	:	:	:	:	2.0	1.9	1.6	1.6	1.7	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	1.7	1.7	1.7	1.9	1.9	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	2.0	2.4	2.2	1.9	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	:	:	:	:	:	:	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	:	:	:	:	:	:	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	1.8	1.7	1.5	1.5	1.5	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	:	:	0.2	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	1.3	1.4	1.4	1.4	1.4	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	1.3	1.3	1.6	1.4	1.1	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	:	:	:	:	:	:	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	:	:	:	:	:	:	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.4.2: Statistical Annex - continued - Croatia

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	:	:	:	:	:	25.1%	24.0%	21.5%	21.5%	23.1%	29.1%	27.9%	27.1%	27.0%	
Day cases curative and rehabilitative care	:	:	:	:	:	2.4%	2.4%	3.3%	4.0%	4.5%	1.7%	1.7%	3.0%	3.1%	
Out-patient curative and rehabilitative care	:	:	:	:	:	22.1%	21.9%	23.3%	25.1%	25.5%	26.8%	26.3%	23.7%	24.0%	
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	26.2%	32.6%	29.4%	26.1%	13.1%	12.6%	14.7%	14.6%	
Therapeutic appliances and other medical durables	:	:	:	:	:	2.1%	1.9%	1.9%	2.5%	2.6%	3.6%	3.6%	4.1%	4.1%	
Prevention and public health services	:	:	:	:	:	1.8%	2.1%	2.3%	2.5%	2.8%	2.8%	2.5%	3.0%	3.1%	
Health administration and health insurance	:	:	:	:	:	2.3%	2.6%	2.9%	2.4%	2.7%	4.5%	4.3%	3.9%	3.8%	
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	:	:	:	:	:	32.2%	30.7%	24.7%	25.3%	27.2%	33.9%	33.6%	32.1%	31.9%	
Day cases curative and rehabilitative care	:	:	:	:	:	3.3%	3.2%	3.9%	5.0%	5.5%	1.9%	2.0%	3.4%	3.5%	
Out-patient curative and rehabilitative care	:	:	:	:	:	24.1%	24.1%	23.4%	24.7%	25.3%	22.9%	23.5%	22.2%	22.5%	
Pharmaceuticals and other medical non-durables	:	:	:	:	:	22.6%	22.9%	27.3%	24.1%	19.6%	11.8%	11.9%	12.6%	12.7%	
Therapeutic appliances and other medical durables	:	:	:	:	:	1.3%	1.3%	1.2%	1.2%	1.2%	1.8%	1.9%	2.0%	2.1%	
Prevention and public health services	:	:	:	:	:	2.4%	2.7%	2.7%	3.1%	3.4%	2.9%	2.5%	3.2%	3.2%	
Health administration and health insurance	:	:	:	:	:	2.9%	3.2%	2.6%	2.6%	2.8%	4.1%	4.0%	3.6%	3.4%	
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	:	:	:	0.70	:	0.72	:	0.98	1.06	1.04	1.12	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	0.5	:	0.6	:	0.6	0.7	0.8	1.6	0.9	0.9	1.0	
CTS per 100 000 inhabitants	:	:	:	1.4	:	1.6	:	1.6	1.6	1.5	1.5	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	0.1	:	0.1	:	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	:	:	:	:	:	18.0	:	15.0	15.1	15.5	15.4	
Proportion of the population that is a regular smoker	:	:	:	:	:	:	:	:	24.5	:	23.2	22.3	21.8	20.9	
Alcohol consumption litres per capita	11.6	11.8	12.6	12.1	12.2	12.1	12.2	11.5	12.4	12.1	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	250	253	266	266	267	278	284	299	303	314	319	324	330	338	344
Practising nurses per 100 000 inhabitants	483	492	503	522	511	531	542	568	583	580	583	837	835	825	833
General practitioners per 100 000 inhabitants	:	:	:	:	55	50	51	53	54	57	55	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	6.9	6.4	6.4	6.0	6.4	6.1	6.0	6.9	6.1	6.3	6.8	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	15	16	16	16	16	15	15	15	15	15	15	17	16	16	16
Day cases discharges per 100 000 inhabitants	298	332	319	1,863	3,076	4,538	5,487	6,704	7,949	9,494	12,399	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	88.0	87.0	85.6	84.9	83.1	75.2	76.7	77.3	73.7	71.7	76.3	77.1	76.4	76.5	76.8
Hospital average length of stay	7.8	7.6	9.9	9.6	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	1.9	2.0	1.9	10.5	16.4	23.5	26.4	31.0	34.5	38.6	45.0	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.2	5.4	5.4	5.5	5.6	5.7	5.8	5.8	5.9	5.9	5.9	5.9	Croatia	EU	
AWG risk scenario	5.2	5.5	5.6	5.8	6.0	6.2	6.4	6.5	6.6	6.7	6.7	6.7	0.7	0.9	
													1.5	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.7	3.6	3.5	3.5	3.4	Croatia	EU	
													-18.8	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.5. CYPRUS

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

GDP per capita in Cyprus was, in 2015, below EU average with 23,818 PPS (EU: 29,610). The population was estimated at 0.85 million in 2016. According to Eurostat projections, total population is projected to increase from around 0.85 million in 2016 to 1.0 million in 2070.

Total and public expenditure on health as % of GDP

Total expenditure on health has relatively stable in the past decade. However expenditure as a percentage of GDP (6.8% in 2015) was relatively moderate and well below the EU average of 10.2% in 2015. When expressed in per capita terms, also total spending on health, at 1,564 PPS in 2015, was less than half of the EU average of 3,305 for the same year. The gap is more marked for the GDP share of public spending on health care: 2.9% of GDP in Cyprus in 2015 vs. 8.0% of GDP in the EU; and 674 PPS in Cyprus vs. an EU average of 2,609 PPS in 2015. Looking at health care without long-term care ⁽¹⁰⁵⁾ reveals a similar picture, with public spending markedly below the EU average, but it reduces the relative gap (2.8% vs 6.8% in 2015).

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.4 pps of GDP, below the average growth level expected for the EU of 0.9 pps of GDP, according to the "AWG reference scenario" ⁽¹⁰⁶⁾. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 0.6 pps of GDP from now until 2070 (EU: 1.6). Overall, projected health care expenditure increase is expected to add to budgetary pressure, contributing

⁽¹⁰⁵⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹⁰⁶⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

to the risk for long-term sustainability of public finances ⁽¹⁰⁷⁾.

Health status

Life expectancy at birth (83.7 years for women and 79.9 years for men) was above EU average levels of 83.3 and 77.9 years in 2015. The same is true for healthy life years, with 63.4 years for women and 63.1 years for men in Cyprus compared with, respectively, 63.3 and 62.6 for the EU in 2015. Similarly, the infant mortality rate of 2.7‰ was, in the same year, below the EU average of 3.6‰, having fallen throughout the last decade from a value of 4.6‰ in 2005.

As for the lifestyle of the Cypriot population, data indicates a high proportion of regular smokers (25.2% in 2014), being above the EU average of 21.0 (value in 2015). Conversely, the proportion of obese population was below the EU level at 13.9% (EU: 15.4%), and the latest available figure on alcohol consumption is below the EU level for the same year (9.0 vs. 10.1 for the EU in 2013) and below the 10.2 value for 2015. Based on available data, over the last decade the proportion of population smoking seems relatively unchanged and the average alcohol consumption has slightly decreased.

System characteristics

Overall description of the system

The Cypriot health system is made up of two uncoordinated sub-systems of similar size: a public one and a separate private one. The public system is highly centralised and planning, organisation, administration and regulation are the responsibility of the Ministry of Health (MoH). It is mainly financed by the state budget, as well as by contributions to health insurance from civil servants and civil servant pensioners, with services provided via a network of public hospitals and health centres directly controlled by the MoH. Public providers' employees have the status of civil servants and are salaried employees.

The current system has led to an unequal

⁽¹⁰⁷⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

distribution of services and inequities in access to care. Also, prices, capacity, and care quality in the private sector are not sufficiently regulated. There is no implemented coherent framework matching separate provision of public and private healthcare services, leading to inadequate and ineffective coverage. There is an over-burdened public healthcare sector leading to high waiting times for selected consultations, surgical procedures and diagnostic tests, and potentially also leading to a decrease in the quality of care. The over-capacity of private health care providers is exacerbated. This has led to wasteful allocative inefficiencies in total health care resources in Cyprus.

To address these inefficiencies and to ensure efficiency gains in the mid-term, the Cypriot authorities are pursuing to implement a dual strategic reform program. Firstly, it aims to raise resilience of the system and to improve the access to quality health care in Cyprus with the autonomisation of public hospitals. Public hospitals financial autonomy can facilitate the improvement of access to quality health care and foster it, thereby administering their own budgets based on available resources. The public hospitals' autonomisation should lead to normalisation of admissions and length of stay as well as the appropriate utilisation of infrastructure, staff as well as the efficient use of hospitals' properties.

Secondly Cyprus will implement a National Health Insurance Scheme (NHIS). Both relevant legislations for hospital autonomisation and NHIS were enacted on the 216th of June 2017. The main goals of NHIS are: (i) ensuring universal healthcare coverage; (ii) pooling the public and private financing; (iii) overcoming the fragmentation of provision of uncoordinated private and public care; (iv) improving system organisation and monitoring; (v) improving access to and quality of care. According to the enacted legislation, NHIS will become operational on June 1st 2020, with the first phase of NHIS (outpatient health care: Family Doctors, Specialists for outpatient care, Pharmaceuticals and Labs for outpatient care) are due to become operational a year earlier (1st June 2019).

Coverage

Citizens below a determined income level used to be free health care beneficiaries of the Public

Health System (around 80% of the population), while the rest of the population (non-beneficiaries) paid according to fee schedules by the MoH. As from 1 August 2013 new fees and co-payments were set that reduced the share of free health care beneficiaries to around 70% of the population. As demand exceeds significantly the supply for free public health care services, long waiting lists for some specialties create barriers to access for those services. For this reason, part of the population uses the private sector health care services for outpatient consultations and routine procedures while, using the public sector health care services for more costly services. Overall, the recorded proportion of the population covered by public or primary private health insurance was reported at 83% in 2015 vs. the EU average of 98%.

The introduction of the NHIS is expected to increase the accessibility of the whole population and will provide free access to the private and the public health care sectors.

Administrative organisation and revenue collection mechanism

The public health care budget is financed by the state. In addition, a contribution-based health care scheme is implemented for civil servants, and there are co-payments defined for beneficiaries and non-beneficiaries of public health care services. The public health sub-system as well as most decision-making processes are centralised. Public hospitals form part of an integrated system of civil service and ministerial control management, such that managerial decisions are taken outside of the hospitals.

Role of private insurance and out of pocket co-payments

The public health care system has since long been criticised for failing to effectively cover the population leading to inadequate and ineffective coverage. The latter is associated with the fact that around 50% of people eligible for free public health care opt to visit the private sector and pay out-of-pocket (mostly for ambulatory care services) to avoid long waiting times. As a result, the combined share of private and out-of-pocket spending out of total health expenditure (56.9% in 2015, with 43.9% covered by out-of-pocket expenditure alone) is the largest in the EU (EU

average: 21.6% for the two combined and 15.9% for out-of-pocket alone in 2015, respectively). The population non eligible for free public health care services is to some degree covered by private health insurance schemes, although the domestic private health insurance industry is still at an infant stage.

Types of providers, referral systems and patient choice

As stated above, public and private provision coexist. Public primary care is provided in hospital outpatient departments, urban and rural health centres and sub-centres. Public dental care is provided in dental clinics in hospital outpatient departments and PHCCs. Public general hospitals offer specialist outpatient care and district hospitals and Specialist Centres such as the Bank of Cyprus Oncology Centre, Cyprus Institute of Neurology and Genetics offer outpatient and inpatient hospital care. Private health services include a variety of specialists and dentists who provide their services in their own facilities, typically in the largest urban areas.

The number of practising physicians per 100 000 inhabitants has risen above the EU average in 2015 (358 vs. 344 for the EU), after steadily growing over the past decade, though still below average during that time. Also the number of general practitioners (GPs) per 100 000 inhabitants in 2015 was above the EU average, with 87 vs. 78 for the EU in the same year. At the moment, besides some form of referral in the case of public provision, there is no formal referral system from primary to specialist and hospital care. A main feature of the NHIS is the concept of family doctors and the mechanism of referral system from primary care to specialist doctors and other providers. In other words, all citizens would register with a family doctor, who would act as a gatekeeper referring patients to specialist and other providers.

Cyprus has seen a reduction in the number of acute care beds per 100 000 inhabitants in the last decade (342 in 2015 vs. 375 in 2005) and their number, remains below the EU average of 402. About half of the beds are publicly owned. The future number of acute care beds will depend on the combination of public hospitals' reorganisation following autonomisation and the NHIS implementation with optimal use of effective

modern technologies at hospitals such as day-care and laparoscopic services, the availability of follow-up care and the availability of long-term care services. With the planned autonomisation the public hospitals shall be turned into independent and autonomous units that can compete with private providers on an equal basis to establish contracts with the purchasing authority (Health Insurance Organisation - HIO).

Treatment options, covered health services

The benefit package is explicitly defined and is comprehensive. It covers family doctor and specialist outpatient visits, pharmaceuticals, laboratory tests, inpatient care, allied health professional services, A&E, ambulance services, rehabilitation and palliative care.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Currently, doctors in the public sector are paid a salary, while in the private sector they are paid on a fee-for-service basis. Public sector remuneration is determined by the central government. The private sector fees are determined by the free market and depend on reputation of each specific doctor, although an indicator of private sector fees is set by the Medical Council. At the moment there is no activity or performance related payment in the public sector. With the implementation of the NHIS, family doctors' (FDs) reimbursement shall entail a 3-tier payment: (i) an age-adjusted capitation (per number of patients); (ii) an activity-based reimbursement, depending on doctor activities regarding preventive medicine practices, chronic disease management, and (iii) a performance related reimbursement that will be tied to, among others, referral and prescribing behaviour. The details of how this will be implemented are in the process of being finalised. A uniform reimbursement policy is to be applied to both public and private sector providers.

Specialists' outpatient services will be reimbursed on a fee for service basis (per activity) adjusted through a point system mechanism in order to achieve implementation of a hard global budget. As regards to the reimbursement of specialists' inpatient services in hospitals, these will be incorporated into the DRG to which each case will be assigned. It is expected that with its

introduction, the DRG system will promote the containment of inpatient expenditure through the increased transparency concerning clinical activities. In addition, as the HIO will treat the public and private sectors exactly the same, it is expected that, through the competitive environment which will be created, an improvement in hospital efficiency and quality of service provided will occur.

Currently the annual MoH budget includes a specific hospital budget allocated to each hospital according to need, primarily on a historical basis adjusted to inflation. As a result, there are no incentives for cost-awareness and control from the part of the public providers. Consistently, when looking at hospital activity, inpatient and day case discharges ranked much lower than the EU average in 2015 (respectively 7 discharges per 100 inhabitants vs. 16 in the EU and 1,584 day case discharges vs. 7,635 in the EU per 100 000 inhabitants). This suggests that there is room to increase hospital activity. It also suggests that as a result of hospital inefficiency patients waiting times may be higher than otherwise possible.

The market for pharmaceutical products

In the private sector, pharmaceutical care is provided through registered private pharmacies and financed with out-of-pocket payments. The prices of imported pharmaceuticals are set through external price referencing. A 3% mark-up is added to the external reference price (ERP) to cover the cost of importing pharmaceuticals. The price set is the wholesale price. The wholesale prices include the wholesale margins and the distribution costs. Since early 2018, the Pharmacy margins have been set to be regressive, incorporating both percentage and fee. They reach 37% on wholesale price for the medicines up to €10, 35% for the medicines between €0.01 – 250, € 83 for the medicines between €250.01-1500 and €100 for the medicines above €150. Pharmacists also receive a flat fee of €1 per prescription. A 5% VAT is added to the net price.

The external price referencing is also applied for setting the prices of imported generics, in case the corresponding originators are not included in the price list. In general, the price of the generics cannot exceed 80% of the price of the original branded product marketed in Cyprus. For locally

manufactured generics, the ex – factory price is set on the basis of the production cost plus a mark-up of 20%, in cases where the originator is not included in the price list. Along with the imported generics, local manufactured generics should not exceed 80% of the original product included in the price list. Price revisions take place annually. A recalibration of the pricing method is performed semi-annually.

Public spending on pharmaceuticals in Cyprus looks low compared to the average for EU countries, with 0.2% of GDP spent on the area in 2015 compared with an average of 1.0% of GDP for the same year.

There are no lists of medicines (positive or negative) in the private sector as pharmaceutical care is not reimbursed. Prescribing habits of private doctors are not monitored, although the authorities often issue guidelines and recommendations for the correct use of medicines to the prescribing physicians.

In the public sector pharmaceutical care is provided through public pharmacies and currently falls under the Pharmaceutical Services of the Ministry of Health. The procurement of medicinal products is the responsibility of the Directorate of Purchases and Procurement of the Ministry of Health and is block-funded by the Ministry of Finance. For the supply of medicines a public procurement method is used. Pharmaceutical care is provided to eligible patients, according to the Medical Institutions and Services General Regulations.

Pharmaceuticals provided to the eligible patients are included in the Hospital Formulary which provides contemporary information about medicines available from public hospitals and health care centres. In the past years, a co-payment scheme has been implemented which enables doctors to prescribe a limited number of drugs not included in the approved list, but available in the private sector. The medicines in the co-payment scheme are partly reimbursed by the Government. The amount reimbursed is based on the price difference between the price of the co-payment drug and the price of the corresponding available drug on the list of approved drugs.

In order for a new product to be added to the Hospital Formulary, a formal pharmaceutical request form has to be submitted by a specialist physician practising in a public hospital. Generics and generic substitution are used widely in the public sector. The use of generics provides high cost savings in the public sector. Conversely, the use of generics in the private sector is limited. One of the reasons for this is the fact that pharmacists are not allowed to substitute original pharmaceutical products for generic medicines. Furthermore, the promotion of generic medicines is still limited, and the Cypriot government does not provide any incentives for doctors and pharmacists. A draft legislation allowing for generic substitution in private pharmacies as part of the implementation of the NHS is currently undergoing legal vetting.

A general reform of the pricing and reimbursement system is expected due to the introduction of the NHIS. This reform will unify the pharmacy market under common pricing and reimbursement rules.

Use of Health Technology Assessments and cost-benefit analysis

The government currently builds up its HTA capacity. For pharmaceuticals, the criteria for inclusion of a pharmaceutical in the List of Approved Pharmaceuticals include: product-specific criteria (e.g. medical and therapeutic value, safety, lack of alternative therapies); economic criteria (e.g. cost effectiveness, budget impact); patient-specific criteria (e.g. age, sex, chronically or terminally ill patients); and disease-specific criteria (e.g. severity of illness, special medical needs). The Drugs Committee assesses all of the above criteria.

eHealth, Electronic Health Record

The Ministry, as part of its ambitious health sector reform program that requires universal access for all public sector health providers to an Integrated Health Information System (IHIS) and their routine use of it, is in the process of a tendering procedure to obtain a new enhanced IHIS that will incorporate the enhancements and/or amendments required to support the reform process, as well as to expand in all the public hospitals and health centres all over Cyprus, complementing the existing IHIS that is currently used in 2 Public

Hospitals (in Nicosia and Famagusta) and some health centres. Furthermore, the Ministry is exploring the conversion of the existing paper medical records into digital records that will complement the Electronic Health Records created by IHIS. At the same time, the Ministry is in the process of developing the National Contact Point for e-Health (under Connecting Europe Facility funding), as part of the e-Health Network project to facilitate cross border healthcare between the network's member states. Additionally, it will abide to the requirement of the EU regulations, to provide by the end of 2019 a common secure framework that will facilitate the Electronic Exchange of Social Security Information (EESSI) between the corresponding institutions or the liaison bodies of each EU Member State.

The main objective is to provide a functional interoperable solution that will ensure electronic data exchange of patient records with other EU countries, the extension, in the future, of services to the Cyprus private healthcare sector, implementation of the further National Health Insurance System (NHIS) reform and other major Cyprus health care initiatives that involve development of electronic data exchange.

In view of the implementation of the NHIS, the Health Insurance Organisation (HIO), on the 30th March 2017, has contracted the development, implementation, operation and support of a total solution for the information technology system and other business processes of the NHIS. Health care providers will have access to the system to submit claims and issue prescriptions, lab orders and referrals. The system will store clinical patient data as they emerge from the activities of the doctors such as referring and prescribing and the submission of claims.

Health promotion and disease prevention policies

Though total expenditure on prevention and public health services as a share of GDP and as share of total current health expenditure were below the EU average in 2015 (0.1% of GDP and 1.7% of total current health expenditure in Cyprus versus 0.3% and 3.2% in the EU, respectively), based on a self-assessment of the country's public health capacity and services, using the WHO tool for 10 Essential Public Health Operations, Cyprus obtained a

positive score in this area⁽¹⁰⁸⁾. The assessment report forms the basis for national planning and policy in the area as well as to monitor progress and further enhance the delivery of public health services. Prevention is expected to increase further with the introduction of the NHIS and the concept of the Family Doctor since the design includes the provision of incentives for specific preventive and screening activities.

Recently legislated and/or planned policy reforms

Health sector reforms gained some momentum under the Economic Adjustment Programme. A Memorandum of Understanding on Specific Economic Policy Conditionality (MOU) attached to this economic adjustment programme included fiscal and structural measures intended to “control the growth of healthcare spending, strengthen the sustainability of the health sector's funding structure and improve the efficiency of public healthcare provision”.

Specific measures were intended to increase the availability of publicly financed health services, to initiate processes to improve the quality of care in public provision of health services and to increase revenue for the health sector. These included: (a) a revision of exemptions from user charges and the introduction of a new contribution of 1.5% on the gross salary or pension for active and retired civil servants; (b) a 30% increase in user charges for publicly provided health services for ‘non-beneficiaries’ and the introduction of new user charges (co-payments) and increased user charges for higher levels of care; (c) financial disincentives for using emergency care in non-urgent situations; financial disincentives in the form of co-payments to minimise medically unnecessary laboratory tests and use of pharmaceuticals; (d) MOU measures provided for the restructuring and autonomisation of public hospitals, the restructuring of the Ministry of Health, Associated Facilities/Organisations and the Health Insurance Organisation (HIO). They provided also for the implementation of the National Health Insurance Scheme.

⁽¹⁰⁸⁾ The assessment was based on the revised 2014 version of the WHO tool for 10 Essential Public Health Operations.

Based upon the MOU a number of initiatives have been implemented: the development and implementation of the information technology infrastructure for the NHIS, the review of income thresholds for free access to health care, the creation of evidence-based protocols for laboratory tests and prescribing medicines, the establishment of a system for health technology assessment (HTA), the preparation of new clinical guidelines for the management of high-cost diseases, the introduction of coding for diagnosis-related groups (DRGs) in both public and private hospitals to provide the basis for a future payment mechanism, shadow-budgeting for public hospitals, and periodic reviews of various other measures (using HTA to define the scope of publicly covered services, user charges policy and the introduction of income-related contributions earmarked for the NHIS), introduction of working time flexibility, definition of a basket of publicly covered (reimbursable) medical services and establishment of a system of family doctors to refer patients to other levels of care, etc.

The current planning of the comprehensive reform of the healthcare sector is soon to be completed and besides the Autonomisation of Public Hospitals, will include the modernisation of Primary Healthcare, the eHealth, the establishment of University Clinics, the setup of National Medicines Organisation and the introduction of National Health Insurance System that will be key for accelerating reforms and provide citizens with high level healthcare services, in a single market, without public – private boundaries, with the patient in the centre, able to choose healthcare provider. The NHIS will be developed and implemented based on the fundamental principles of free choice of provider, social equality and solidarity, financial sustainability and universal coverage. The NHIS will be based on a single payer system.

Challenges

The analysis above demonstrates the various challenges that the health system faces and that health reforms have to tackle. The highlighted intrinsic distortions in the system cause inequality, inefficiencies and prevent access to health care. The reforms planned by the MoH in the next two years have the potential to tackle many of these issues, but given the anticipated resistance on the

side of stakeholders, a strong political commitment is of the essence and will be a key driver of success in responding to the challenges. These following can currently be identified:

- To achieve the full implementation of the NHIS with the aim to ensure equal access, financial sustainability and quality health care. This, in turn, would ensure universal coverage and the pooling of financing to the sector, currently non-existent. The full implementation of the NHIS would also address the inefficiencies related to the fragmentation of care provision characterised by separate public and private provision that do not make part of a whole coherent framework.
- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades that is a risk to the long-term sustainability of public finances.
- To implement a comprehensive reform of the public hospital sector increasing their managerial capacity and legal ability for autonomous decision making within a strategic framework of public health policies aiming at: an increase of hospital output, an improvement of the provision of after-hours primary care services, and the creation of integrated networks of public primary health care centres working in a coordinated fashion with public hospitals.
- To reorganise and promote public hospitals autonomy so as to ensure equal competition between private and public health providers and ease failure of coordination between the public and the private sector leading to duplication and waste of resources.
- To focus on enhancing primary health care services and to implement a comprehensive reform of the primary health care centres to improve efficiency and care coordination between types of care and to encourage patients to first make use of primary care vs. specialist care vs. hospital care.
- To define a comprehensive human resources strategy to ensure a balanced skill-mix that allows a strong primary care sector to develop.
- To continue to improve data collection and data exchange by monitoring of inputs, processes, outputs and outcomes including putting interoperable IT-systems into place in every public hospital. Accessibility and interoperability should be extended to allow, with the consent of the patient and/or health professional, access and exchange of data with private sector ehealth systems as well as with the patient, to eventually achieve a patient-centred eHealth system.
- To make systematic use of cost-effectiveness information, as planned, in determining the basket of goods and the extent of cost-sharing.
- To foster health promotion and disease prevention activities, promoting healthy life styles and disease screening given the pattern of risk factors (smoking, alcohol, obesity, circulatory system diseases).

Table 2.5.1: Statistical Annex – Cyprus

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	15	16	18	19	19	19	20	19	18	18	18	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	27.1	27.6	28.9	28.1	26.3	25.4	24.6	23.2	21.9	22.1	23.8	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	2.2	2.8	2.6	1.3	-4.4	-1.3	-2.2	-4.5	-5.7	-0.3	2.6	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	1.3	-1.2	15.4	2.7	-2.9	1.8	-6.8	-4.9	-1.5	-4.9	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	6.4	6.3	6.1	6.9	7.4	7.3	7.6	7.4	7.5	7.4	6.8	10.2	10.1	10.1	10.2
Total current as % of GDP	6.4	6.3	6.1	6.9	7.4	6.3	6.6	6.7	6.9	6.8	6.8	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.7	0.6	0.6	0.1	0.9	0.6	0.2	0.3
Total per capita PPS	1,428	1,500	1,535	1,844	1,895	1,875	1,947	1,829	1,708	1,653	1,564	2,745	2,895	2,975	3,305
Public total as % of GDP	2.8	2.9	2.6	2.8	3.1	3.1	3.1	3.2	3.1	3.3	2.9	8.0	7.8	7.8	8.0
Public current as % of GDP	2.5	2.6	2.6	2.8	3.1	3.0	3.1	3.0	3.2	3.0	2.9	7.7	7.6	7.6	7.8
Public total per capita PPS	617	683	669	761	804	795	815	767	747	686	674	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.27	0.27	0.09	0.05	0.06	0.06	0.07	0.06	0.07	0.08	0.06	0.2	0.2	0.2	0.2
Public as % total expenditure on health	43.2	45.5	43.6	41.3	42.4	42.4	41.9	41.9	43.8	41.5	43.1	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	7.7	7.3	7.7	7.5	7.3	7.4	6.9	6.7	6.1	5.4	6.3	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	:	83.0	83.0	83.0	:	83.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	50.1	48.6	49.1	51.3	49.9	41.0	42.8	44.0	43.1	44.8	43.9	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	502.1	503.0	505.2	508.5
Life expectancy at birth for females	80.8	82.0	82.1	82.9	83.5	83.9	83.1	83.4	85.0	84.7	83.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.5	78.1	77.6	78.2	78.5	79.2	79.3	78.9	80.1	80.9	79.9	76.6	77.3	77.7	77.9
Healthy life years at birth females	58.2	63.4	62.8	64.5	65.3	64.2	61.0	64.0	65.0	66.3	63.4	62.0	62.1	61.5	63.3
Healthy life years at birth males	59.8	64.2	63.1	63.9	64.8	65.1	61.6	63.4	64.3	66.1	63.1	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	55	63	54	49	45	46	103	107	92	93	98	64	138	131	127
Infant mortality rate per 1 000 live births	4.6	3.1	3.7	3.5	3.3	3.2	3.1	3.5	1.6	1.4	2.7	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.8	1.8	1.8	2.3	2.6	2.0	2.1	2.0	2.1	2.0	2.0	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	2.0	2.1	2.1	2.1	2.1	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.3	1.3	1.2	1.2	1.3	1.0	1.1	1.1	1.2	1.1	1.2	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.4	1.4	1.4	1.7	1.9	1.5	1.5	1.4	1.5	1.4	1.3	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.3	0.3	0.3	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.7	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Prevention and public health services	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.5.2: Statistical Annex - continued - Cyprus

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	27.6%	29.3%	29.6%	33.7%	34.5%	31.8%	31.6%	30.5%	30.4%	29.6%	29.2%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	1.4%	1.6%	1.5%	2.3%	2.3%	3.3%	3.3%	3.3%	3.3%	3.4%	3.4%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	:	:	:	:	:	:	30.0%	30.6%	30.4%	31.1%	30.6%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	20.6%	20.4%	20.5%	18.0%	17.3%	15.9%	16.2%	16.4%	16.6%	16.8%	17.1%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	2.2%	2.1%	2.1%	2.3%	1.9%	1.9%	2.0%	2.1%	2.0%	2.2%	2.2%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	0.5%	0.6%	0.7%	0.6%	0.5%	0.8%	0.8%	0.7%	0.7%	0.6%	0.7%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.6%	1.6%	1.5%	1.6%	1.5%	1.3%	1.5%	1.5%	1.6%	1.5%	1.5%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	54.4%	55.6%	54.9%	61.1%	61.0%	48.5%	48.4%	47.4%	46.4%	46.3%	46.2%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	0.8%	1.2%	0.8%	0.7%	1.0%	4.0%	3.9%	3.9%	4.1%	4.0%	4.2%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	12.9%	13.1%	12.9%	13.2%	13.6%	22.8%	22.6%	23.0%	22.9%	23.8%	22.6%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	12.1%	10.8%	11.0%	10.7%	10.4%	7.6%	7.7%	7.6%	8.2%	7.7%	7.6%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	1.2%	1.2%	1.2%	1.1%	1.0%	1.7%	1.3%	1.3%	1.3%	1.3%	1.7%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	8.1%	8.1%	8.2%	8.6%	8.4%	2.6%	3.2%	3.3%	3.4%	3.4%	3.5%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.66	0.65	0.89	1.64	1.86	1.93	2.00	1.97	1.97	1.99	2.01	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	2.0	1.9	3.6	3.5	3.3	3.3	3.2	3.2	3.3	3.3	3.4	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	:	:	:	:	:	:	13.9	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	:	:	25.9	:	:	:	:	:	25.2	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	11.4	11.5	11.6	12.0	10.8	11.3	10.7	10.6	9.0	:	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	257	249	270	276	281	289	297	302	320	338	358	324	330	338	344
Practising nurses per 100 000 inhabitants	409	450	458	450	471	476	487	475	492	501	523	837	835	825	833
General practitioners per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	80	87	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	2.1	2.0	2.1	2.1	2.3	2.3	2.3	2.4	2.4	2.2	2.2	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	7	7	7	7	8	8	8	8	8	8	7	17	16	16	16
Day cases discharges per 100 000 inhabitants	632	701	749	701	935	1,574	1,437	1,505	1,672	1,737	1,584	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	84.0	79.0	76.0	88.2	84.7	84.2	90.9	75.8	74.4	74.7	72.2	77.1	76.4	76.5	76.8
Hospital average length of stay	6.0	5.8	:	:	:	:	:	6.0	6.1	6.4	6.2	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	8.7	9.7	9.1	9.7	11.1	16.9	15.3	15.7	17.7	18.2	16.7	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.1	3.2	3.2	0.4	0.9	
AWG risk scenario	2.8	2.9	3.0	3.0	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.4	0.6	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	20.2	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.6. CZECH REPUBLIC

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

GDP per capita in PPS is at 23,700 and below EU average of 29,600 in 2015. The Czech Republic has a population of 10.5 million inhabitants. During the coming decennia the population will slightly decrease to 10.0 million.

Total and public expenditure on health

Total expenditure on health as a percentage of GDP (7.7% in 2015) is below the EU average (10.2%). It has increased from 6.7% in 2006. Total public expenditure on health as a percentage of GDP is below the EU average (CZ: 6.4% vs. EU: 8.0%). Looking at health care without long-term care⁽¹⁰⁹⁾ reveals a similar picture with public spending below the EU average (CZ: 5.5% vs. EU: 6.8% in 2015). In 2015, total (1,734 PPS) and public (1,447 PPS) per capita expenditure were lower than the EU average (3,305 PPS and 2,609 PPS)⁽¹¹⁰⁾.

Expenditure projections and fiscal sustainability

Public expenditure on health care is projected to increase by 1.1 pps of GDP ("AWG reference scenario"), above the average increase of 0.9 pps for the EU. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 1.9 pps of GDP from now till 2070 compared to the EU average of 1.6 pps⁽¹¹¹⁾. Overall, projected health care expenditure poses a risk to the long-term sustainability of public finances. Over the long run, medium fiscal sustainability risks appear for the Czech Republic. These risks derive primarily from the projected impact of age-related public

spending (notably health care, long-term care and pensions)⁽¹¹²⁾.

Health status

Despite showing an improvement, the health status of the Czech population lags slightly behind the EU average. While showing a consistent increase, life expectancy (81.6 years for women and 75.7 years for men in 2015) is still below the EU average (83.3 and 77.9 years of life expectancy in 2015). However, healthy life years are close to the respective EU averages (63.7 years for women and 62.4 years for men in 2015 vs. EU average of 63.3 and 62.6, respectively). Amenable mortality rates show a consistent decrease over the decade but are still fairly high (179 deaths per 100 000 inhabitants in CZ vs. 127 in the EU). Infant mortality is below the EU average (2.5‰ vs. 3.6‰).

System characteristics

System financing

The Czech health care system is a compulsory social health insurance (SHI) system with universal coverage. Entitlement to coverage is based on permanent residence and each person must be covered through either a SHI, a foreign social insurance system or a private health insurance.

The SHI system plus contribution from the state budget comprises 83% of total health expenditure. State budget contribution is devoted to capital investments in facilities directly managed by the Ministry of Health (teaching hospitals, specialised health care, research and postgraduate education facilities) or by regional authorities (regional and municipal hospitals), as well as to public health services (training costs of medical personnel, variety of health promotion and disease prevention, medical research, postgraduate education, etc.).

In 2016, mandatory SHI contributions account for 75% of revenues of the SHI system. The remaining 25% come from the state contributions for certain groups of economically inactive people (children,

⁽¹⁰⁹⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽¹¹⁰⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to EUROSTAT data series, which reflect only current expenditure.

⁽¹¹¹⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽¹¹²⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

students, women or men on parental leave, pensioners, unemployed, imprisoned and asylum seekers). SHI contributions take the form of a payroll tax split between employers and employees; self-employed must contribute a fixed percentage of 13.5% of half of their profits. Contributions of employed people amount to 13.5% of gross monthly wages, with employees paying 4.5% and employers 9%. The state-financed monthly contributions represented 969 CZK in 2018 (approx. €37.5) for every economically inactive person. These revenues for the Czech health system are set by law and consist in a fixed amount of money, occasionally adjusted – "valorised".

Next, SHI contributions are redistributed among the existing health insurance funds (see section "Administrative organisation") according to a risk-adjustment scheme based on age, gender, ex-post compensation of the most expensive cases and from January 2018 onwards, the mechanism adjusts for chronic diseases as identified by Pharmaceutical Cost Groups (PCGs). The VZP is the largest fund, covering approximately 57% of the population in 2016. It was the first one created in 1992, covering at that time 100% of the market. However, it is supposed to have the worst risk-structure of the members, as funds established later have been taking over mainly younger and healthier part of the population.

Private spending includes mainly three categories of expenditures: out-of-pocket payments for over-the-counter pharmaceuticals and some dental procedures; co-payments on medical aids and prescription pharmaceuticals, whose price exceeds the reimbursement amounts. Private expenditure accounted for 17% of total health expenditure in 2015. This amount is still among the lowest in the EU, well below the average of 22%. Although available, voluntary health insurance plays a minor role in health care financing (less than 1% of health expenditure in 2015), which is mainly due to the broad range of benefits available under the SHI schemes.

Administrative organisation

SHI is assured by health insurance funds (in 2017 there were 7 of them, down from 27 in the mid-1990s), which are quasi-public, self-governing bodies that act as payers and purchasers of care.

Patients can change their choice of a fund once every 12 months. Funds are obliged to accept all applicants and not allowed to make risk selection.

Even if the state has been decentralised (end of 1992) – and therefore competencies given to regional authorities beside the state level – the level of expenditure in administering such a system does not seem high, though its share in the total health expenditure has slightly increased in recent years. Public and total expenditure on health administration and health insurance as a percentage of GDP, both 0.2% in 2015, are below the respective EU average (0.3% and 0.4%).

Coverage of services, types of providers, referral systems and patient choice

The range of coverage includes "any medical treatment delivered with the aim of maintaining or improving an individual's health status". In practice the benefits are rationed at the point of use by the provider, based on four factors: the negative lists of procedures and services excluded from reimbursement; the positive lists of approved pharmaceuticals, medical aids and dental aids that may be reimbursed (together with the depth of coverage); the annual negotiation process between health insurance funds and health care providers resulting in establishment of specific conditions of reimbursement attached as amendments to the existing long-term contracts between them; the List of Health Services, being a fee schedule of rationed benefits updated annually by the Ministry of Health.

Primary care is provided by physicians working in private practices or in health centres and polyclinics. Currently 95% of services are provided in private – mainly individual – practices. Polyclinics and health centres are usually private legal entities, which additionally offer ambulatory specialist care. Sometimes health centres are owned by the municipalities, and primary care physicians pay a rent for the use of the facilities.

Patients register with a primary care physician of their choice and can switch to a different doctor once every three months. The gatekeeper role of general practitioners (GPs) is limited. The primary care physicians can refer patients to specialists, but the direct access to the latter is neither institutionally restricted nor economically

discouraged. The patients frequently use this option in practice, circumventing the GPs and addressing directly the specialists. The referral is, however, obligatory for admissions to secondary inpatient care (except for emergency cases). Moreover, visits to the dentists and gynaecologists are always direct and without referral.

Secondary care services are provided by private practice specialists, hospitals and specialised inpatient facilities. Following a series of reforms in the 1990s, formerly state-owned hospitals are currently owned and managed by a wide range of entities: ministries, regions and municipalities, private entities and churches.

Empirical evidence suggests a deficit of GPs and an overutilisation of secondary and tertiary care in comparison with primary care. The number of practising physicians (369 per 100 000 inhabitants in 2013) and nurses (801 per 100 000 inhabitants in 2015) slightly exceeded or was at the EU averages (338 and 833, respectively). However, the number of GPs is lower than the EU average (70 vs. 78 per 100 000 in 2013).

On the other hand, these figures suggest relatively easy access and possibly excessive use of inpatient care. All indicators, although falling over the last years, still exceed significantly respective figures for the entire EU on average: number of acute care beds (425 vs. 402 per 100 000 of population in 2015), number of inpatient hospital discharges (19.4 vs. 16.2 per 100 inhabitants in 2015) and average length of stay in acute care hospitals (9.3 vs. 7.6 days in 2015). Those figures, together with the data on the share of hospital day case in total discharges (3.3% in the Czech Republic vs. 32.3% in the EU in 2015), may suggest an inadequate allocation of resources between acute health care on the one hand and outpatient care on the other hand, only partially explained by the reimbursement system (see below).

Purchasing and contracting of health care services and remuneration mechanisms

Health insurance funds conclude long-term contracts with the providers, for five or eight years. Only the framework of such contracts is defined by law. They include necessary conditions for providing health care, general payment mechanisms, conditions for ending the contract,

other rights and obligations of both sides, but do not include specific conditions of reimbursement, which are subject to annual negotiations.

GPs are paid according to a system of risk-adjusted capitation fees, accounting for age, but not gender of the patients. The number of patients per physician is subject to a limit above which the payment is reduced. However, some services (such as preventive examinations and visits to patients' homes, accounting in 2011 for approximately 30% of physicians' income) are still paid on the fee-for-service basis.

Ambulatory care specialists are reimbursed using a digressive fee-for-service system, based on the List of Health Services. This List defines the number of points for each service and the threshold of the amount of services up to which providers are fully reimbursed. In case the limit is exceeded, the value of points is reduced. The financial value of the point is bargained annually between insurance funds and provider organisations.

Payments to hospitals are very diverse. Mainly, the system of prospective global budgets is used. The budget's level is based on the amount of services provided during the relevant period of the previous year and the sum of points from the List of Health Services. A growing number of cases are paid on the basis of diagnosis-related groups (DRGs) system: each year an updated version of the list of relative weights is published and the base rate is set. This system is supplemented with flat fees per insured person, which are applied according to the thresholds based on the amount of services provided during the previous year.

The market for pharmaceutical products, the use of Health Technology Assessment and cost-benefit analysis

Public and private pharmaceutical expenditure accounts for 17.4% of total current health expenditure, which is slightly more than the EU average (14.6% in 2015). The pharmaceutical reimbursement system is based on reference pricing, whereby the basic reimbursement level for each reference group of substitutes is set at the price of the least expensive of those in the entire EU. Also maximum ex-factory prices for pharmaceuticals are based on international benchmarking, and the group of reference

countries includes eight EU Member States (Estonia, France, Italy, Lithuania, Hungary, Portugal, Greece and Spain). The combined maximum amount of mark-ups by pharmacies and wholesalers is set by the Ministry of Health. The system is regressive, with maximum surcharges being reduced in line with growing ex-factory prices.

In order to constrain pharmaceutical expenditure, health insurance funds are allowed to introduce pharmaceutical budgets for each provider and impose penalties in case of overspending.

E-health (e-prescription, e-medical records) and information and reporting mechanisms

The information and communication technologies are still not sufficiently spread in the Czech health system. Health technology assessment of treatments and procedures is practically not available due to the lack of technical infrastructure. For the same reason, the information on patients owned by the health insurance funds is not efficiently used in practice.

The use of electronic medical records is being currently developed with a number of projects allowing physicians to share patient information between physicians and with the concerned patient. Information systems are broadly used for reimbursement and accounting purposes, and the use of web pages is being increasingly spread among health insurance funds, health care facilities and physicians. A system of mandatory e-prescriptions was approved to be effective from January 2018.

Although the country lacks a unified system for assessing the quality of health services, the providers in some sectors of care (mainly those under direct responsibility of the Ministry of Health) are more and more frequently assessed via surveys, patient satisfaction questionnaires and accreditations.

The government aims to ensure secure sharing of important health and economic information, thereby achieving improved quality, comfort, security and transparency of the health care system. Computerisation allows professionals and patients to make the right decisions based on correct information. Full use of modern

communication technologies will contribute to a better and more cost-effective care. In this context, the aim is to create a working government strategy to ensure standards necessary for the development and sustainability of e-health and to oversee their implementation.

Health promotion and disease prevention policies

The need to improve health status further through promotion and prevention activities is a policy priority. The government intends to support the implementation of health promotion projects aimed at promoting and optimisation of physical activity among the general public and specific target groups. It will also support health promotion projects aimed at achieving changes in eating habits and increasing health literacy, especially among children and the youth. It will also focus on reducing the health risks of the living and working environment and reducing health risk behaviour, in particular regarding protection against addictive substances. The government will also promote the prevention of infectious diseases, particularly through measures aimed at antimicrobial resistance and vaccination programs. Currently, total and public expenditure on prevention and public health services as a % of GDP (0.2% in 2015) are below the EU average (0.3%).

Recently legislated and/or planned policy reforms

A number of measures aimed at improving the cost-effectiveness and governance of the health care sector, based on the priorities in the Government's manifesto and the National Strategy for Health 2020, are in various stages of implementation. In order to provide for a better hospital financing system, the 'diagnosis-related group re-start' project formally commenced in January 2015, with the aim of full implementation by 2019-2020. In order to improve the economic database of the DRG system, as part of this project, a reference network of hospitals has been established in 2016. Conversely, user fees in the outpatient sector were eliminated in 2015.

As regards sources of healthcare financing, the Government approved, with effect from 1 January 2018, a medium-term measure introducing stable year-on-year increases of state payments for state

insured persons in 2018, 2019 and 2020 (Government Regulation No. 140/2017 Coll. and Act No. 297/2017 Coll.). The purpose of this measure is to introduce a certain level of stability and to increase the predictability of the development of part of the public health insurance system revenues. In 2018–2020, there will thus be regular year-on-year increases in state payments for state insured persons by approx. CZK 3.5 billion (approx. €136 million).

With effect from 2018 (bill amendment to Act No. 592/1992 Coll.), redistribution of funds among health insurance companies has been changed to include Pharmaceutical Cost Groups (PCGs) to enable more equitable distribution of funds among health insurance companies and thus improve the quality of care for chronically ill patients. As many as 25 PCGs, such as diabetes, depression, transplantation, renal failure or HIV, have been introduced. The system allows for patients to be categorised into more than one PCG.

New legislation to ensure availability of pharmaceuticals is effective since April 2017 (Act No. 378/2007 and Act No. 48/1997 amended by Act No. 66/2017 Coll). It allows the Ministry of Health to monitor and limit or ban export of certain pharmaceuticals with temporary low supply, which may endanger their availability to Czech patients and therewith threaten patients' health or life. In cases of unauthorised export, the law foresees penalty fees of up to 20 million CZK (approx. €740740) and a ban of distributor's activities. Furthermore, the availability of drugs is to be guaranteed along the distribution chain. There is an obligation for the producers to deliver requested drugs to distributors up to a respective market share and for distributors to provide ordered drugs to pharmacies within 2 working days. The law also decreases the maximum price for newly introduced generic biological drugs (biosimilars) from previously 85% to now 70% of the price in the reference group.

There are governmental plans to replace the non-transparent process of determining the reimbursement of medical devices with a new system. The government aims also at strengthening, through legal measures, the state supervision of health insurance flows and over the functioning of the health insurance companies. The government will introduce a

transparent system of quality indicators for comparing and publishing of quality of health care in individual health care facilities, so that these are accessible to both patients and specialists⁽¹¹³⁾. Competencies between the Ministry of Health and the National Reference Centre shall also be specified.

The government's commitment to effectively define the process of entry of new technologies into the health system still continues. A methodology has been established within the project of implementation of health technology assessment (HTA), which should ensure that new technologies, which are to be covered by the public health insurance system, bring adequate and documented counter value. It is necessary to decide on the form of the institutional arrangements for HTA and the manner of its inclusion in the process of determining the extent of medical care covered by public health insurance. In 2017 the usability of the methodology has been tested further as well as its eventual deployment via a law.

Challenges

The analysis above has shown that many reforms are ongoing, aiming mainly at an improved efficiency of the health system via cost-containment and more market-oriented solutions, and its results are yet to be evaluated. The main challenges for the Czech health system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades, which is a risk to the long-term sustainability of public finances.
- To clearly define a basic package of the health care services which are covered from the general insurance (i.e. to have a more explicit definition of SHI benefits).
- To develop a comprehensive human resources strategy that tackles spatial/regional disparities

⁽¹¹³⁾The authorisation will have to be embedded in the amendment to the Act No. 372/2011 Coll. on Health Services.

- in health care accessibility (physicians' density, waiting times).
- To enhance primary care provision and tackle the excessive use of specialist and hospital care, in particular with a referral system to specialist care either through financial incentives or by making it compulsory; to promote use of GPs' services, by strengthening organisational and financial incentives for both doctors and patients; to foster the coordination of care between primary, secondary and hospital care in order to reduce redundant and duplicated medical examinations and laboratory tests, doctor visits and unnecessary drug prescriptions; to monitor the impact of the abolishment of patient cost-sharing at different levels of care, especially with regard to avoidable use of services.
 - To improve the cost-efficiency within hospitals, ensuring that care is provided in the most clinically appropriate and cost-effective way, by implementing the new DRG based financing system, by increasing the proportion of elective care provided on a day-case basis and day-of-surgery admissions; to consider reducing the high number of acute care bed capacity.
 - To fully implement the e-prescription tool for pharmaceuticals, improving the rational prescription and use of medicines and enhancing access to cost-effective medicines, while generating savings to payers.
 - To introduce a system of quality indicators for comparing and publishing of quality of health care in individual health care facilities, that should be accessible to patients and clinicians.
 - To foster the use of centralised procurement procedures for pharmaceuticals, but also for other medical and non-medical goods, generating savings to payers, while ensuring access to high-quality products in the health system.
 - To ensure a greater and more systematic use of health technology assessment to achieve decisions, for example about the SHI coverage or reimbursement rates.
 - To foster health promotion and disease prevention activities, promoting healthy life styles and disease screening given the pattern of risk factors (smoking, alcohol, obesity, circulatory system diseases).

Table 2.6.1: Statistical Annex – Czech Republic

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	110	124	138	161	149	157	164	161	158	157	168	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	20.0	21.0	22.2	22.2	20.6	21.1	21.7	21.6	21.8	22.5	23.7	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	6.3	6.5	5.0	1.6	-5.4	2.0	2.0	-0.9	-0.5	2.6	5.1	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	2.1	2.2	2.7	8.9	-3.3	1.8	6.4	5.3	0.4	1.9	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	6.9	6.6	6.5	6.5	7.5	7.1	7.1	7.6	8.1	7.9	7.7	10.2	10.1	10.1	10.2
Total current as % of GDP	6.2	6.6	6.4	6.4	6.2	6.0	6.4	7.3	7.8	7.7	7.2	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.7	0.1	0.1	0.1	1.3	1.1	0.7	0.3	0.3	0.3	0.4	0.9	0.6	0.2	0.3
Total per capita PPS	1,054	1,139	1,233	1,442	1,518	1,511	1,574	1,660	1,714	1,667	1,734	2,745	2,895	2,975	3,305
Public total as % of GDP	5.9	5.7	5.4	5.5	6.4	6.1	6.5	6.5	6.8	6.6	6.4	8.0	7.8	7.8	8.0
Public current as % of GDP	5.8	5.6	5.3	5.5	6.4	6.0	6.2	6.2	6.5	6.3	6.0	7.7	7.6	7.6	7.8
Public total per capita PPS	894	972	1,032	1,222	1,298	1,288	1,441	1,421	1,442	1,388	1,447	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.07	0.06	0.07	0.08	0.08	0.05	0.34	0.32	0.27	0.25	0.43	0.2	0.2	0.2	0.2
Public as % total expenditure on health	84.8	85.3	83.7	84.8	85.5	85.3	91.6	85.6	84.1	83.3	83.4	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	17.7	17.9	19.2	16.8	18.0	18.6	17.6	16.7	17.6	17.9	17.9	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.2	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	11.1	11.7	13.6	16.1	15.1	15.3	15.0	15.3	13.6	14.1	14.8	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	10.2	10.2	10.3	10.3	10.4	10.5	10.5	10.5	10.5	10.5	10.5	502.1	503.0	505.2	508.5
Life expectancy at birth for females	79.2	79.9	80.2	80.5	80.5	80.9	81.1	81.2	81.3	82.0	81.6	82.6	83.1	83.3	83.3
Life expectancy at birth for males	72.9	73.5	73.8	74.1	74.3	74.5	74.8	75.1	75.2	75.8	75.7	76.6	77.3	77.7	77.9
Healthy life years at birth females	60.0	59.9	63.3	63.4	62.7	64.5	63.6	64.1	64.2	65.0	63.7	62.0	62.1	61.5	63.3
Healthy life years at birth males	58.0	57.9	61.4	61.3	61.1	62.2	62.2	62.3	62.5	63.4	62.4	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	128	119	97	94	95	88	196	193	194	177	179	64	138	131	127
Infant mortality rate per 1 000 live births	3.4	3.3	3.1	2.8	2.9	2.7	2.7	2.6	2.5	2.4	2.5	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.1	2.1	2.0	2.0	2.3	2.2	2.2	2.2	2.0	1.9	1.8	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.5	1.5	1.6	1.8	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.7	1.5	1.4	1.4	1.7	1.5	1.5	1.6	1.4	1.3	1.3	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.1	2.0	1.9	1.9	2.2	2.1	2.1	2.1	1.9	1.8	1.7	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.3	1.4	1.4	1.4	1.7	1.7	1.8	1.8	1.8	1.7	1.6	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.3	1.1	0.9	0.9	1.2	0.9	0.9	1.0	0.9	0.8	0.8	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.6.2: Statistical Annex - continued – Czech Republic

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data				
	2009	2011	2013	2015												
Inpatient curative and rehabilitative care	34.0%	31.6%	30.5%	31.3%	36.7%	36.0%	34.5%	29.6%	25.9%	24.8%	24.3%	29.1%	27.9%	27.1%	27.0%	
Day cases curative and rehabilitative care	1.1%	1.1%	1.3%	1.9%	1.8%	1.9%	2.0%	1.7%	1.5%	1.7%	1.7%	1.7%	1.7%	3.0%	3.1%	
Out-patient curative and rehabilitative care	24.0%	23.0%	24.9%	27.4%	34.2%	34.0%	33.4%	29.6%	26.9%	27.1%	27.5%	26.8%	26.3%	23.7%	24.0%	
Pharmaceuticals and other medical non-durables	27.7%	23.1%	21.9%	21.7%	27.2%	24.5%	23.5%	21.8%	18.2%	17.3%	17.4%	13.1%	12.8%	14.7%	14.6%	
Therapeutic appliances and other medical durables	3.9%	3.5%	3.8%	3.9%	3.5%	3.8%	3.6%	3.1%	2.9%	2.9%	2.9%	3.6%	3.6%	4.1%	4.1%	
Prevention and public health services	1.9%	2.1%	2.2%	2.8%	2.7%	3.0%	2.7%	2.1%	2.9%	3.3%	2.8%	2.8%	2.5%	3.0%	3.1%	
Health administration and health insurance	3.7%	3.3%	3.6%	3.8%	4.0%	4.0%	3.8%	3.1%	2.9%	2.7%	2.6%	4.5%	4.3%	3.9%	3.8%	
Composition of public as % of public current health expenditure																
Inpatient curative and rehabilitative care	35.5%	36.4%	35.6%	35.5%	34.2%	34.5%	34.4%	33.0%	29.6%	28.8%	28.1%	33.9%	33.6%	32.1%	31.9%	
Day cases curative and rehabilitative care	1.2%	1.3%	1.6%	2.2%	1.7%	1.9%	2.1%	2.0%	1.8%	2.1%	2.0%	1.9%	2.0%	3.4%	3.5%	
Out-patient curative and rehabilitative care	23.1%	24.3%	26.0%	26.2%	26.6%	28.5%	29.0%	29.6%	27.0%	27.2%	27.5%	22.9%	23.5%	22.2%	22.5%	
Pharmaceuticals and other medical non-durables	22.4%	19.3%	17.2%	15.8%	19.1%	15.6%	15.2%	16.4%	13.8%	12.8%	12.6%	11.8%	11.9%	12.6%	12.7%	
Therapeutic appliances and other medical durables	1.7%	1.6%	1.7%	1.5%	1.3%	1.3%	1.3%	1.4%	1.4%	1.3%	1.3%	1.8%	1.9%	2.0%	2.1%	
Prevention and public health services	1.7%	2.1%	2.2%	3.7%	2.2%	2.5%	2.3%	2.1%	3.2%	3.0%	3.0%	2.9%	2.5%	3.2%	3.2%	
Health administration and health insurance	3.6%	3.8%	3.9%	4.2%	3.8%	3.8%	3.7%	3.5%	3.5%	3.3%	3.2%	4.1%	4.0%	3.6%	3.4%	
Expenditure drivers (technology, life style)																
MRI units per 100 000 inhabitants	0.31	0.38	0.44	0.50	0.57	0.63	0.69	0.69	0.74	0.74	0.83	1.0	1.4	1.5	1.9	
Angiography units per 100 000 inhabitants	0.6	0.6	0.7	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	
CTS per 100 000 inhabitants	1.2	1.3	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.6	2.1	1.9	2.1	2.3	
PET scanners per 100 000 inhabitants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	
Proportion of the population that is obese	:	:	:	18.3	:	:	:	:	:	18.7	:	15.0	15.1	15.5	15.4	
Proportion of the population that is a regular smoker	24.3	23.4	24.0	21.8	23.8	22.8	21.7	22.9	22.2	22.3	18.2	23.2	22.3	21.8	20.9	
Alcohol consumption litres per capita	13.2	13.0	13.4	13.3	13.2	12.7	12.4	12.7	12.4	12.7	:	10.4	10.3	10.1	10.2	
Providers																
Practising physicians per 100 000 inhabitants	355	356	356	354	356	359	364	367	369	:	:	324	330	338	344	
Practising nurses per 100 000 inhabitants	809	805	800	794	806	808	803	806	799	793	801	837	835	825	833	
General practitioners per 100 000 inhabitants	73	72	71	70	70	70	70	70	70	:	:	77	78	78	78	
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402	
Outputs																
Doctors consultations per capita	13.2	13.0	12.6	11.4	11.2	11.0	11.1	11.1	11.1	:	:	6.2	6.2	6.2	6.3	
Hospital inpatient discharges per 100 inhabitants	22	21	21	20	20	20	19	19	20	20	19	17	16	16	16	
Day cases discharges per 100 000 inhabitants	343	364	378	440	439	466	524	585	642	669	666	6,362	6,584	7,143	7,635	
Acute care bed occupancy rates	78.0	:	:	:	75.3	73.8	72.8	73.1	73.9	74.9	74.3	77.1	76.4	76.5	76.8	
Hospital average length of stay	7.1	:	10.3	10.0	10.0	9.9	9.8	9.5	9.4	9.4	9.3	8.0	7.8	7.7	7.6	
Day cases as % of all hospital discharges	1.6	1.7	1.8	:	2.1	2.3	2.6	2.9	3.2	3.3	3.3	28.0	29.1	30.9	32.3	
Population and Expenditure projections																
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.			
AWG reference scenario	5.4	5.6	5.7	5.9	6.1	6.2	6.3	6.5	6.5	6.6	6.6	6.5	CZ	EU		
AWG risk scenario	5.4	5.7	6.0	6.3	6.6	6.8	7.0	7.2	7.3	7.4	7.4	7.3			1.1	0.9
															1.9	1.6
Note: *Excluding expenditure on medical long-term care component.																
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %			
Population projections until 2070 (millions)	10.6	10.7	10.7	10.7	10.6	10.6	10.5	10.5	10.4	10.3	10.2	10.0	CZ	EU		
															-5.4	2.0

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.7. DENMARK

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

GDP per capita in PPS is at 34,800 and far above EU average of 29,600 in 2015. Denmark has a population of 5.7 million inhabitants. During the coming decennia the population will steadily grow, from 5.7 million inhabitants in 2016 to 6.8 million inhabitants in 2070. This 19% increase is much higher than the EU average of 2%.

Total and public expenditure on health as % of GDP

Total expenditure on health as a percentage of GDP (11% in 2015) has increased over the last decade (from 9.8% in 2005), although down from a peak of 11.5% of GDP in 2009, and is above the EU average⁽¹¹⁴⁾ of 10.2% in 2015. Throughout the last decade, total public expenditure has increased as % of GDP: from 8.1% in 2005 to 9.2% of GDP in 2015 (EU: 8.0%). Looking at health care without long-term care⁽¹¹⁵⁾ reveals a different picture with public spending not above but at the EU average (DK: 6.8% vs. EU: 6.8% in 2015). When expressed in per capita terms, total spending on health at 3,956 PPS was above the EU average of 3,305 in 2015. So was public spending on health care: 3,308 PPS vs. an EU average of 2,609 PPS in 2015⁽¹¹⁶⁾.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 1.0 pp of GDP, at the average growth level expected for the EU of 0.9 pps of GDP, according to the "AWG reference scenario". When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 1.8 pps

of GDP from now until 2070 (EU: 1.6)⁽¹¹⁷⁾. Overall, projected health care expenditure increase is expected to add to budgetary pressure. However, currently no fiscal sustainability risks appear for Denmark over the long run. This risk-free outlook derives primarily from the favourable initial budgetary position, which fully mitigates the projected ageing costs increase over the long term⁽¹¹⁸⁾.

Health status

Life expectancy at birth (82.7 years for women and 78.8 years for men) is around the EU averages of 83.3 and 77.9 years in 2015. With 57.6 years for women and 60.4 years for men, healthy life years are below the averages in the EU (63.3 and 62.6, for women and men)⁽¹¹⁹⁾. The infant mortality rate of 3.7‰ is at EU average (3.6‰) in 2015.

As for the lifestyle of the Danish population, the data indicates an average number of regular smokers (17% in 2015), being below the EU average of 21%, having declined in the past years. The proportion of the obese population was below EU level at 14.4% in 2014 (EU: 15.4% in 2015), and alcohol consumption is slightly below the EU level.

System characteristics

Overall description of the system

Denmark has a universal, tax-based decentralised health care system. The five Regional Authorities are responsible for hospital and psychiatric care funding as well as for establishing collective agreements with providers of ambulatory care, while 98 local authorities are in charge of mainly rehabilitation and health promotion and disease prevention policies.

⁽¹¹⁴⁾The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹¹⁵⁾To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽¹¹⁶⁾Note that these PPS figures reflect current plus capital health expenditure in contrast to EUROSTAT data series, which reflect current expenditure only.

⁽¹¹⁷⁾The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽¹¹⁸⁾European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽¹¹⁹⁾Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

Coverage

The system provides full population coverage. Primary, specialist and hospital care are free at the point of use for most services. Children, senior citizens, those with certain medical conditions and disabilities and those who have reached an upper limit for out-of-pocket payments are exempted from cost-sharing.

Administrative organisation and revenue collection mechanism

The budget for public spending in the health sector is decided by the Parliament on the basis of (yearly) budget agreements between the government and the local authorities. The financing of the system comes from central and local taxes (regions are not allowed to levy taxes). State funding is distributed to the regions and 98 local authorities via block grants. Part of the funding attributed to the regions, including local authorities funding, is activity-related, an element that came into place in 2002, and revised in 2007 and 2012. Today, around 20 percent of the funding of the regions is activity-related, within an overall framework with fixed spending caps set by Parliament.

The funds to be allocated to hospitals, GPs and specialist, within the agreed overall budget, are determined by the regional authorities. Funds for remuneration of medicines are earmarked. The Ministry of Health, through the National Health Board, provides guidelines and regulation (the overall legal framework) for care provision, supervises care delivery and sets public health priorities. It is, however, for hospitals to define the remuneration of other health staff, for regions to plan hospital capacity and equipment and for the regions and local authorities to pay providers for the delivery of care (regions buy curative care, local authorities pay for promotion, prevention, rehabilitation, children dental care).

Role of private insurance and out of pocket co-payments

Supplementary private insurance (to cover the services not covered by public provision/funding) is used by 33% of the population, and 40% buys complementary health insurance to cover cost-sharing.

In 2015, private expenditure and out-of-pocket expenditure were 16.4% and 15.3% of total health expenditure, below the EU averages (21.6% and 15%, respectively).

Types of providers, referral systems and patient choice

Primary care is provided by general practitioners (GPs) working in private individual or group practices and outpatient specialist care is provided in private individual practices. They receive almost all of their income from services paid by the regions. Most hospitals are owned by the regions (about 97% of all hospital beds are public) and hospital doctors are employees of the regions. In general, providers are paid by the regions on the basis of contractual arrangements with relevant unions.

The density of physicians in Denmark is at the average density in the EU. In 2014, there were 366 practising physicians per 100 000 inhabitants, compared to 344 in EU in 2015. The number of general practitioners is below the EU average (71 per 100 000 inhabitants vs. 78 in the EU). The number of nurses per 100 000 inhabitants is 1,670 in 2014 and is double the EU average of 833. Authorities have put strong efforts to use primary care vis-à-vis specialist and hospital care. Residents have to register with a GP and there is a compulsory referral system from primary care to specialist doctors i.e. GPs act like gatekeepers to specialist and hospital care.

Regional authorities decide on hospital capacity and equipment capacity. Hospitals have autonomy to recruit medical staff and other health professionals, within the budget set by the regional authorities and within pay scales set by the agreements between the regional authorities and the unions. Private hospitals are free to establish and expand their capacity in compliance with quality and safety requirements. In 2015, the number of acute care beds was 246 compared to 402 per 100 000 inhabitants in the EU. The average length of stay of hospital inpatients is one of the lowest in the EU, such that with low capacity, Denmark still achieves high discharge rates (15 discharges in Denmark versus 16 in the EU per 100 inhabitants).

Treatment options, covered health services

The benefit package is not explicitly defined but the health interventions provided are based on clinical effectiveness.

Price of health care services, purchasing, contracting and remuneration mechanisms

Outpatient and inpatient specialists in hospitals are paid a salary. GPs are paid a mix of a capitation and a consultation fee by the regional authorities, within an overall spending cap for GP's set by agreement with the relevant organisations. GP's performance based payment includes a variety of fees for different kinds of consultation, including advice on prevention. General fiscal consolidation also involves more focus on monitoring and control of activity and spending in private practise (GP's etc.).

Regional authorities decide how hospitals are paid in combination of prospective global budgets and activity-related payments based on diagnosis-related groups (DRGs). DRG weights are defined at central level with hospital remuneration methods and negotiation of rates taking place at regional level.

The market for pharmaceutical products

The authorities have implemented some policies to control expenditure on pharmaceuticals. There is no direct price regulation although the government and the industry have agreed on a scheme for price reductions for medicines used in hospitals. The regional authorities have also, according to the budget agreement for 2011, established a new committee to establish a better coordination between the regions on recommended use of expensive medicines in hospitals to ensure use of the most cost-effective medicines and at the same time establish a potential for lower prices through procurement.

In 2016 the Danish Parliament agreed on seven principles for prioritising of hospital medicine, e.g. the efficiency and cost effectiveness of different medicines.

The authorities also apply reference pricing on reimbursed medicines, whereby the maximum reimbursement level of a medicine is the lowest

price of the products in each group of products, defined on the basis of same active ingredient, form and strength and package size (with some deviation allowed). There is a positive list of reimbursed products which is based on health technology assessment information when available.

Authorities promote rational prescribing of physicians through treatment guidelines complemented with monitoring of prescribing behaviour and education and information campaigns on the prescription and use of medicines. Authorities monitor the general consumption of prescribed medicines closely. Generic substitution⁽¹²⁰⁾ is obligatory in Denmark. A public webpage indicates which products can replace each other to help pharmacists and consumers choose.

Use of Health Technology Assessments and cost-benefit analysis

Comprehensive data, including comparable information on physician and hospital activity and care quality (clinical outcomes, use of appropriate processes) and on patient's experience and satisfaction with the care obtained through surveys is publicly available. Authorities also encourage providers' self-assessment and want to conduct regular comparisons with health care activity in other countries and develop further statistics on areas such as waiting times and choice.

The Danish Centre for Evaluation and Health Technology Assessment and various regional resource centres conduct and gather information on health technology assessment which is used to define coverage of new medicines, new high-cost equipment and new procedure as well as their level of reimbursement and respective clinical guidelines. Existing clinical guidelines and practice protocols are coupled with financial incentives and the monitoring of physician activity to encourage compliance with those guidelines.

⁽¹²⁰⁾ Generic substitution is normally defined as a right or an obligation of pharmacists to substitute a brand medicine with a cheaper (generic) medicine with the same active ingredient(s).

E-Health, Electronic Health Record

Under the current National IT Strategy for the Danish Health Care Service authorities have been introducing a number of ICT and e-health solutions to allow for nationwide electronic exchange of medical data, including the patient electronic medical records and e-prescribing to support and render the referral system and care coordination more effective, reduce medical errors and increase cost-efficiency. A system with a full overview of all medical records of a patient from GP's, hospitals etc. is now fully operational in the hospitals and GP's and was implemented in the local municipalities in 2015. A system with a full overview of all records of a patient was fully implemented in 2013. The strategy ended in 2018 and currently the local level (regions and municipalities) and the government are preparing a new E-health strategy. The focus of the new strategy is supposed to be on developing common IT infrastructure in order to share more patient information between health care providers for better coordination and continuity of care.

Health promotion and disease prevention policies

Authorities have strongly emphasised health promotion and disease prevention measures in recent years. Promotion and prevention are seen by authorities as a means to ensure long-term sustainability of the health budget. Total and public expenditure on prevention and public health services as a % of GDP were above the EU average.

Recently legislated and/or planned policy reforms

A number of initiatives aimed at improving the transparency on quality and results, patient rights, psychiatry, cancer care for children and public health care are in various stages of implementation:

Transparency reform – greater focus on quality and results. The aim is to create greater and more systematic knowledge about quality and best practice, as well as achieving better management of the health care and long-term care system based on improvements in the overall health of the population, a high level of patient involvement and

lower expenditure per capita. Large funds have been transferred to building a national platform for valid and up to date health data. The accessible health data should provide a platform for transparency and dissemination of best practice as well as management and priorities in the health care sector on the basis of key goals and results.

The right to assessment and identification of needs and to treatment of somatic and psychiatric patients. The rights aim to secure a short and effective diagnosing and treatment of all patients. Under current rules patients have the right to assessment and identification within 1 month and the right to treatment within 1 month. If the capacity of the public hospital cannot ensure that a given treatment or assessment can be initiated within 1 month, patients have the right to extended free choice of hospital.

Massive prioritising of the psychiatry. The parliament has agreed to invest 2.2 billion DDK (appx. €295 million) in the psychiatry over the period 2015-2018. This means a massive development of capacity, professionals and facilities and environment to secure an ambitious lift of the psychiatry in terms of quality and equal and fast diagnosis and treatment of the patients. The government has along with the regions and municipalities initiated a review of the regulation and administration of the psychiatric sector in Denmark. The aim is to issue recommendations for better value for money in psychiatric care.

Partnerships to reduce the use of force. In 2014 Finance Act, it was agreed to set a target that the use of force in the psychiatric health services should be reduced by 50 per cent. A permanent grant has been allocated to form partnerships with the regions to meet the target. For instance, the funds may be spent on regional initiatives on patient involvement, competency development and dissemination and implementation of methods that have proven successful based on national and international experience.

Stronger health care agreements. Five health care agreements have been made for 2015-2018 – one for each region. They include new mandatory key action areas and specific objectives. Across the boundaries of key action areas, the health care agreements have a focus on inequality in health and active involvement of patients and their

relatives. The aim with the five health care agreements is to ensure coherence and coordination of efforts in the patient care that goes on across hospitals, general practice and municipalities so that each patient and citizen receives a treatment that is consistent and of high quality at the lowest effective cost.

National quality goals. The Government, Danish Regions and Local Government Denmark have set eight ambitious goals for the overall quality of the Danish health care. The national goals set a framework for the continuous improvement of quality and efficiency. The national goals are supported by a number of local goals and activities, which lead to local improvements. The national goals are a part of a national programme to improve the quality and efficiency in the health care system in Denmark. Beside the national goals, the quality programme consist of e.g. quality improvement teams, a national leadership programme and enhanced patient involvement and empowerment.

In addition, the Danish government has identified a number of future priorities for health. Thus, the government has presented a cancer plan which aims at reducing interregional differences in treatment and outcomes and the national cancer mortality rate. Moreover, the government has presented a national plan targeting elderly patients. The plan aims at improving the general conditions for patients and reducing overcrowding in the hospitals. The third priority targets enhancements in quality, coherence and cost-effectiveness, which are the keywords in order to maintain a resilient and sustainable health care system in the future. With an ageing population and increasing demand for health care services is it crucial to map and spread best practices and secure a coherent health care system so that high-quality health care services are carried out as cost-effective as possible.

Furthermore, the government has initiated work on a comprehensive plan to strengthen integrated care, including extended responsibility of the GP's for the care of elderly or chronically ill patients. The aim is a more cost-effective treatment of this group, which is expected to grow significantly over the coming years, and at the same time securing a better quality of care closer to the patient. Finally, the government has initiated work

on a review of the financial regulation and management of the hospital sector. The aim is to develop an improved management model that secures most value from spending.

Challenges

The analysis above shows, that a wide range of reforms have been implemented over the years. Denmark should continue to pursue such reforms. In this regard the main challenges for the Danish health care system are as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated patient packages as well as a focusing on productivity and costs in view of the relatively high spending on health care as a share of GDP and increasing health care expenditure over the coming decades, due to population ageing and non-demographic factors.
- To continue strengthening the integrated health care system, such that general practitioners, municipalities and hospitals work closely together to give citizens a coordinated package of treatment.
- To implement and monitor the effectiveness of the plans to foster quality and access to psychiatric care, while ensuring the high value for money for current investments.
- To implement the reform on transparency of results to inform best practice and contribute to faster diagnosis, treatment and care of the best quality.
- To continue the consolidation of the administrative reform and the new decision-making structure that resulted from it, ensuring coherence of responsibilities.
- To continue to focus on a balanced mix of skills in all parts of the health sector, for instance for nurses to handle tasks in private practice and acute wards, and on a clear referral system, to ensure an effective use of resources.

Table 2.7.1: Statistical Annex – Denmark

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	213	226	233	242	231	243	248	255	259	265	272	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	32.8	34.2	34.7	33.9	31.7	32.9	33.3	32.9	33.0	33.6	34.8	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	2.0	3.6	0.5	-1.1	-5.4	1.4	0.9	-0.1	0.5	1.1	0.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	5.2	1.2	0.8	6.6	-2.0	-1.0	0.9	0.0	2.1	0.4	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	9.8	9.9	10.0	10.2	11.5	11.1	10.9	11.0	10.9	11.0	11.0	10.2	10.1	10.1	10.2
Total current as % of GDP	8.7	8.9	9.0	9.1	9.2	9.3	10.2	10.3	10.2	10.3	10.3	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.1	1.0	1.0	1.1	2.3	1.8	0.7	0.7	0.7	0.8	0.6	0.9	0.6	0.2	0.3
Total per capita PPS	2,885	3,095	3,213	3,372	3,613	3,655	3,638	3,760	3,786	3,904	3,956	2,745	2,895	2,975	3,305
Public total as % of GDP	8.1	8.2	8.3	8.6	9.7	9.4	9.3	9.6	9.1	9.1	9.2	8.0	7.8	7.8	8.0
Public current as % of GDP	7.8	7.9	8.0	8.2	9.3	9.0	8.9	9.0	8.6	8.6	8.7	7.7	7.6	7.6	7.8
Public total per capita PPS	2,390	2,571	2,674	2,832	3,065	3,103	3,109	3,280	3,146	3,234	3,308	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.28	0.31	0.30	0.34	0.40	0.38	0.42	0.55	0.46	0.52	0.49	0.2	0.2	0.2	0.2
Public as % total expenditure on health	82.8	83.1	83.2	84.0	84.8	84.9	85.5	87.2	83.1	82.8	83.6	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.9	15.6	16.1	16.5	15.6	14.9	15.4	14.6	15.4	15.2	15.3	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	14.7	14.5	14.6	14.1	13.7	13.7	13.3	12.9	13.8	14.0	13.7	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.7	502.1	503.0	505.2	508.5
Life expectancy at birth for females	80.5	80.7	80.6	81.0	81.1	81.4	81.9	82.1	82.4	82.8	82.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.0	76.1	76.2	76.5	76.9	77.2	77.8	78.1	78.3	78.7	78.8	76.6	77.3	77.7	77.9
Healthy life years at birth females	68.4	67.2	67.4	68.8	69.4	69.4	69.4	69.4	69.4	69.4	69.4	62.0	62.1	61.5	63.3
Healthy life years at birth males	68.4	67.7	67.4	68.4	68.8	69.3	69.6	69.6	69.4	69.3	69.4	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	72	71	63	60	58	:	116	112	104	99	98	64	138	131	127
Infant mortality rate per 1 000 live births	4.4	3.5	4.0	4.0	3.1	3.4	3.5	3.4	3.5	4.0	3.7	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.6	2.7	2.7	2.9	3.2	3.1	3.0	3.0	2.8	2.7	2.7	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.5	2.5	2.5	2.6	2.9	2.8	2.9	3.0	3.0	3.0	3.0	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.4	2.5	2.5	2.6	3.0	2.9	2.8	2.8	2.5	2.5	2.5	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	:	0.0	0.0	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.0	2.0	2.0	2.1	2.4	2.3	2.4	2.5	2.4	2.5	2.5	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.7.2: Statistical Annex - continued - Denmark

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	30.1%	30.2%	30.2%	31.5%	35.3%	33.5%	29.6%	29.5%	27.2%	26.6%	26.3%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	28.7%	28.5%	27.8%	28.4%	32.0%	30.2%	28.8%	29.6%	29.1%	29.6%	29.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	9.2%	9.2%	9.4%	8.9%	9.2%	8.8%	7.2%	6.7%	6.9%	6.7%	6.8%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	4.5%	4.5%	4.4%	4.4%	4.7%	4.3%	3.7%	3.7%	3.3%	3.3%	3.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.4%	2.2%	2.3%	2.3%	2.7%	2.7%	2.4%	2.3%	2.5%	2.3%	2.4%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.4%	1.3%	1.7%	1.5%	1.7%	1.6%	1.5%	2.5%	2.1%	2.2%	2.4%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	31.0%	31.3%	31.2%	32.0%	31.9%	31.9%	31.1%	30.8%	29.6%	28.9%	28.5%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	:	:	0.0%	0.0%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	25.4%	25.6%	24.6%	25.1%	25.2%	24.9%	26.8%	27.6%	28.4%	28.4%	28.3%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	5.8%	5.7%	5.7%	5.4%	4.8%	4.8%	4.1%	3.5%	3.6%	3.6%	3.6%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	2.3%	2.3%	2.4%	2.3%	2.3%	2.2%	2.0%	2.1%	1.7%	1.9%	1.8%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.6%	2.4%	2.5%	2.4%	2.6%	2.7%	2.6%	2.5%	2.9%	2.8%	2.9%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	1.2%	1.3%	1.5%	1.3%	1.3%	1.3%	1.2%	2.4%	2.4%	2.6%	2.8%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	:	:	:	:	1.54	:	:	:	:	:	:	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.4	1.6	1.9	2.2	2.4	2.8	2.9	3.3	3.8	3.8	3.8	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.4	0.4	0.4	0.5	0.6	:	0.5	:	0.6	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	11.4	:	:	:	:	13.4	:	:	14.2	14.4	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	26.0	25.0	24.0	23.0	19.0	20.9	:	:	17.0	17.0	17.0	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	11.3	11.0	11.0	10.7	10.1	10.3	10.5	9.3	9.5	9.6	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	331	338	340	349	354	358	363	366	365	366	:	324	330	338	344
Practising nurses per 100 000 inhabitants	1439	1448	1429	1490	1561	1583	1601	1631	1652	1670	:	837	835	825	833
General practitioners per 100 000 inhabitants	69	69	69	71	71	71	71	72	72	71	0	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	4.5	4.5	4.5	4.6	4.6	4.6	4.8	4.7	4.6	4.5	4.4	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	16	16	16	16	16	16	15	15	15	15	:	17	16	16	16
Day cases discharges per 100 000 inhabitants	4,134	4,445	4,620	4,666	5,158	5,546	5,896	5,969	6,043	6,194	:	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	3.5	:	6.6	6.9	6.1	5.9	5.8	5.7	5.6	5.5	5.5	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	21.4	22.4	23.0	:	24.5	25.9	27.6	28.2	28.8	29.3	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	6.9	7.0	7.2	7.3	7.4	7.4	7.5	7.6	7.7	7.7	7.8	7.9	Denmark	EU	
AWG risk scenario	6.9	7.1	7.4	7.6	7.7	7.9	8.1	8.3	8.4	8.5	8.6	8.7	1.0	0.9	
													1.8	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	5.7	5.9	6.1	6.3	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.8	Denmark	EU	
													19.6	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.8. ESTONIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

Estonia, the most northerly of the Baltic states, is a member of the European Union since 2004, has a GDP of around €24 bn., or 23.7 thousand PPS per capita, below the EU average of 30.0 thousand PPS per capita⁽¹²¹⁾. Population was estimated in 2018 at almost 1.3 million inhabitants.

During the coming decennia the population will steadily decrease, from 1.3 million inhabitants in 2016 to 1.2 million inhabitants in 2070. Thus, Estonia is facing a considerable decrease of its population by 11%, while the EU average population is estimated to increase by 2%.

Total and public expenditure on health as % of GDP

Total expenditure⁽¹²²⁾ on health as a percentage of GDP (7.1% in 2015) is well below the EU average⁽¹²³⁾(10.2%), having significantly increased since 2005 (5%). Public expenditure on health as a percentage of GDP (5.5%) is also below the EU average (8% in 2015), but is still significantly higher than in 2005 (4.1%). Looking at health care without long-term care⁽¹²⁴⁾ reveals a different picture with public spending being closer to the EU average (5.2% vs 6.8% in 2015). The growing ratios may underestimate the actual growth in the health sector due to very high GDP growth: prior to the crisis Estonia registered one the highest GDP growth in the EU reaching a double-digit output growth. Indeed, total (1650 PPS in 2015) and public (1265 PPS in 2015) per capita expenditure have more than doubled since 2005. However, they are still considerably lower than the EU average (3305 PPS and 2609 PPS respectively

in 2015). Note though that the share of public expenditure in total expenditure on health is relatively high (76.7%, slightly below the EU average of 78.4% in 2015).

Expenditure projections and fiscal sustainability

Public expenditure on health care is forecast to increase by 0.3 pps by 2070 according to the 2018 Ageing Report reference scenario⁽¹²⁵⁾. Under the risk scenario this could go up by 1.1 pps of GDP.

Overall, for Estonia significant no sustainability risks appear over the short-term and risks over the medium and long run are low⁽¹²⁶⁾.

Health status⁽¹²⁷⁾

Life expectancy in 2015 (82.2 years for women and 73.2 years for men) and healthy life years (56.2 years for women and 53.8 years for men) are below the EU average and, particularly for men, amongst the lowest in the EU⁽¹²⁸⁾. The large difference in male and female life expectancy in Estonia is also explained by differences in avoidable mortality. Specifically, cardiovascular diseases and external causes account for 29.6% and 21.1%, respectively, of deaths among men under-65 years, while accounting for only 22.4% and 12.2%, respectively, among women⁽¹²⁹⁾. It should be noted that Estonia has had the highest gains in health-adjusted life expectancy in the OECD between 2000 and 2015. Men's life expectancy shows a consistent increase from 1995 onwards but suffered a significant decline in the early 1990s, a period of substantial economic and political transition. Additionally, infant mortality has fallen from 5.4 per 1000 live births in 2005 to 2.5 in 2015, falling below the EU average (3.6).

It should also be noted that Estonia has an amenable mortality rate per 100,000 inhabitants

⁽¹²¹⁾ See page 84 <http://www.oecd.org/health/preventing-ageing-unequally-9789264279087-en.htm>.

⁽¹²²⁾ Please note that these figures reflect current plus capital expenditure in contrast to OECD and EUROSTAT data series, which reflect only current expenditure.

⁽¹²³⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units or units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹²⁴⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹²⁵⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽¹²⁶⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽¹²⁷⁾ As well as the statistical annex, this section draws on the State of Health Country profile for Estonia https://ec.europa.eu/health/sites/health/files/state/docs/chp_et_english.pdf.

⁽¹²⁸⁾ Data on life expectancy and healthy life years is from the Eurostat database.

⁽¹²⁹⁾ Data referenced in this sentence comes from 2017.

that is, at 224, far above the EU average of 127 for 2015. Mortality rates associated with cardiovascular diseases nearly double the EU average. The incidence rate of tuberculosis is high as is the incidence rate of lung cancer. Estonia however registers a relatively moderate proportion of people that smoke regularly: 22.1% of adults in 2014, only slightly above the EU average. However, smoking rates are much higher amongst men than women. Alcohol consumption, at 10.3 litres per capita is also close to the EU average of 10.2, although, again, binge drinking among men is high. In 2014, 19.7% of the population was obese, above the EU average of 15.5%. These values on the health status of the population deserve attention and action to protect population health outcomes and reduce the burden of disease.

System characteristics

Overall description of the system

The system is financed primarily through mandatory contributions (earmarked payroll tax on employees and self-employed) and through taxation revenues that pay for ambulance and emergency care and health promotion and disease prevention.

Health expenditure funding comes from social insurance contributions (earmarked payroll tax) plus government taxation, out-of-pocket contributions, private insurance and financial contributions from the rest of the world. An issue of concern is that funding is strongly based on employment-related contributions but the share of non-contributing individuals such as children and pensioners is almost half of the insured. The authorities recognise the narrow revenue base, strongly based on wages (notably in the context of ageing) and there is the intention to enlarge the revenue base for the sector to ensure the long-term sustainability of the sector financing.

Coverage

The Estonia Health Insurance Fund (EHIF) purchases and reimburses care for about 93.6% of the population based on residence and group membership (e.g. unemployed, children, pensioners, full time carers). 6% of the population

are still uninsured and have access to emergency care only.

Administrative organisation and revenue collection mechanism

The EHIF establishes contracts with care providers, including General Practitioners (GPs). However, access to primary care is considered to be very good. Cost-sharing also appears to encourage greater use of primary care services vis-à-vis specialist and inpatient care, which can be cost-effective.

Nevertheless, different measures of the reform of the sickness insurance regime may have important, if not reverse effects in the future. For instance, EHIF compensations are only paid now from the 9th sickness day. Before that, the employer has to cover the costs. First three sickness days are compensated voluntarily by the employer. While some informal payments exist in the health sector, they do not appear to be widespread or significant in magnitude.

The EHIF (which has four regional branches but acts as one purchaser of care) uses its budget to establish contractual arrangements with providers, remunerate doctors, and reimburse medicines.

There is an overall budget constraint defined annually for public spending on health which is quite detailed and transparent. Expenditure cannot exceed revenue. However, revenue and expenditure do not necessarily have to match in each financial year, as the EHIF has some accumulated reserves (around 1% of GDP) and could in principle use those to finance expenditure. In practice though, expenditure has indeed followed the same pattern as revenue. Therefore, when for example the budget has run out, hospitals may in theory postpone surgical interventions for the following year or else the patient has to pay for the full cost. However, in practice such cases are extremely rare.

Role of private insurance and out of pocket co-payments

Cost-sharing applies to home and outpatient visits, hospital stays and medicines, though pensioners and children below 16 have lower out-of-pocket payment. Adult dental care and plastic surgery are

not covered by the EHIF. The share of private expenditure on health in total health expenditure (23.3% in 2015) is slightly above the EU average (21.6%). Out-of-pocket expenditure constitutes about 22.8% of total health expenditure and stands above the EU average (15.9% in 2015). Despite having one of the highest levels of self-reported unmet need for care in the EU ⁽¹³⁰⁾, from the point of view of access, a smaller share of private expenditure than that of its Baltic neighbours and the way cost-sharing is applied across services may ensure better access to basic health care services in Estonia than in Latvia and Lithuania. This hypothesis is supported by higher life expectancy and lower amenable mortality than in those countries. Out-of-pocket expenditure may still pose barriers to access to low income groups and uninsured (authorities do acknowledge that socioeconomic differences have an impact in the use of health services).

While some informal payments exist in the health sector, they do not appear to be widespread or significant in magnitude.

Types of providers, referral systems and patient choice

Primary care is provided by self-employed family practitioners (FPs, equivalent to GPs) and nurses or by family practitioner group practices (owned by family practitioners). Ambulatory specialist care is provided in health care centres, hospital outpatient departments and specialists' own practices. Inpatient hospital care is provided in regional, central, general or local hospitals (state or municipally owned). Outpatient and inpatient providers establish contracts with the EHIF.

Access to primary care is considered to be very good due to the high numbers of general practitioners (GPs), the ability to see the GP within 3 days, and a 24-hour free primary care counselling phone line. Cost-sharing also appears to encourage greater use of primary care services vis-à-vis specialist and inpatient care, which can be cost-effective.

⁽¹³⁰⁾State of Health Country Profile (2017): Estonia https://ec.europa.eu/health/sites/health/files/state/docs/chp_et_english.pdf.

Authorities acknowledge long delays for specialist consultations and inpatient care. They have therefore established centrally managed waiting lists and additional resources to services with the longest lists.

The total number of practising physicians per 100,000 inhabitants has been fairly stable during the last decade (342 in 2015), slightly under the EU average (344). Data on the physician skill/mix indicates that the number of general practitioners (GPs) per 100,000 inhabitants (71 in 2015) has also remained relatively flat since 2005 and is slightly below the EU average (78.3) as part of the authorities' long term effort to improve primary care provision. This has resulted in a relatively good access to primary care to the insured population. The number of nurses (601 in 2015) per 100,000 inhabitants is significantly below the EU average (833). Estonia may have suffered from staff migration to other EU countries where qualified health staff was needed and wage levels were higher. There is also a problem of ageing of the workforce, in 2017 – 73.1% of all physicians had more than 40 years of age (including age groups: 40-49; 50-59; 60+) To retain staff the authorities had increased wages in the sector prior to the crisis but this trend was reversed with the economic crisis to improve fiscal balances. However, there have been constant wage increases since 2011 for doctors (44%) and nurses (42%) between 2011 and 2017, similar to that of the overall wage increase in the country (46%). However, if there is no political will to increase total public spending on health care, salary increases will need to be covered by efficiency gains of hospitals and other health care organisations, as well as a limited increase in OOP payments.

Note that the authorities have made strong efforts to concentrate medical training, emphasise primary care training of doctors and nurses and bring training in line with EU law, and to start developing human resources planning in the sector.

Since the early 1990s, national authorities have made a significant and successful effort to enhance primary care provision and to strengthen the referral system from primary care to specialist doctors and the gatekeeping role of FPs (to reduce the unnecessary use of specialist and hospital

care). All inhabitants have to register with a FP, who acts as family doctor and as a gatekeeper referring patients to other specialists and hospital care. Patients can choose their FP and choose the specialist after referral.

Estonia has seen a large reduction in the number of acute care beds per 100 000 inhabitants in the last decades, and its number is now below the EU average (368 vs. 402 in 2015). Bed occupancy rates have stayed relatively constant and, at 67%, are slightly below the EU average at 78.3% in 2015.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Payments systems have evolved much over the years and consist of a mix of remuneration types. GPs receive a mix of capitation, base fee, distance fee for remote practices, fees for defined services and bonus payments for health promotion, disease prevention and disease management activities. This mixed system intends to render primary care more attractive and to provide incentives for primary care provision including some health promotion, disease prevention activities and disease management. All other staff is remunerated on a salary basis.

Hospital average length of stay (7.6 days in 2015) is at the EU average (7.6 days), having remained relatively flat from 2010. The proportion of hospital surgery performed as day cases was 31.7% in 2011, a significant increase from 4.3% in 2001, close to the EU average of 32.3%. Hospitals remuneration is a mix of activity-based payment using DRGs (diagnosis related groups), fee-for-services and bed-days. Further reliance on prospective payment on the basis of DRGs was planned. Although significantly improved and based on complex criteria, the basis for establishing contracts between the EHIF and the various providers could perhaps be further improved in the long run to favour cost-effective interventions when health technology assessment is applied more regularly.

The market for pharmaceutical products

Total (1.2%) and public (0.6%) expenditure on pharmaceuticals⁽¹³¹⁾ as a percentage of GDP are below the EU average (1.4% and 1% respectively in 2015) and have been relatively constant since 2003 (even since 1999, earliest available data). Public expenditure on pharmaceuticals as a share of public current health expenditure is close to the EU average (12.4% compared to 12.7% in 2015). This suggests that policies regarding pharmaceuticals have been fairly successful at controlling pharmaceutical expenditure.

Imported medicines now come from Western Europe rather than the former Soviet Union, which resulted in a large increase in prices. In order to control overall expenditure the authorities have implemented a large number of policies. The initial price decision is based on a) international prices, as well as b) economic evaluation and c) the cost of existing treatments. In addition, authorities implement 1) price-volume agreements, together with 2) reference pricing, whereby the maximum reimbursement level of a prescribed drug is based on the second lowest price of existing drugs that have the same active ingredient and form, and 3) the definition of positive lists (as much as possible based on economic evaluation). The authorities also implement prescriptions guidelines and monitor prescription patterns of physicians who get feedback once a year. These policies have been very useful in controlling pharmaceutical expenditure growth. Perhaps the authorities could explore if these policies, which currently apply only to reimbursable pharmaceuticals, could be extended to non-reimbursable medicines especially in the context of high out-of-pocket payments.

Use of Health Technology Assessments and cost-benefit analysis

Estonia has a Health Technology Assessment Centre that conducts health technology assessment. It was at first funded mainly from Structural Funds (01.02.2012-30.08.2015), and it will in the future be getting its budget from the state. The authorities and professional associations are developing

⁽¹³¹⁾ Expenditure on pharmaceuticals used here corresponds to category HC.5.1 in the OECD System of Health Accounts. Note that this SHA-based estimate only records pharmaceuticals in ambulatory care (pharmacies), not in hospitals.

treatment guidelines to harmonise and rationalise medical practices.

Data management and E-health (e-prescription, e-medical records)

Digital prescription was launched in 2010 and by 2012 most prescriptions were written electronically. Individuals can access their own medical data by using their electronic ID cards via the patient's portal.

Data has substantially improved in recent years. Information on activity and services is collected by the EHIF and the Ministry of Social Affairs on a routine yearly basis. Providers are obliged to provide annual data reports according to national standards. This information is used for contracting purposes and allocation of funds. The Hospital Network Development Plan is used to make projections of hospital activity and future hospital capacity needs and thus hospital licensing and hospital service regulation (and helped adjusting/reducing hospital capacity over the years). There are other plans for other services.

Health promotion and disease prevention policies

The government has approved the Public Health Development Plan for 2009-2020 with the objective of continuously improving the health status of the population: increasing average life expectancy at birth, increasing healthy life years and reducing socio-economic inequalities in health. This plan denotes a recent much stronger concern with health promotion and disease prevention. Total and public expenditure on prevention and public health as a % of GDP (0.2% and 0.1% in 2015) are below the EU average (respectively 0.3% and 0.3%). The same is true for public expenditure on prevention as a proportion of public current health expenditure (2.4% vs a EU average of 3.2%) However, total (3.2%) expenditure on prevention and public health as a % of the total public expenditure on health is in fact slightly higher than the EU average in 2015.

Transparency and corruption

The Estonian health system is perceived to be transparent and featuring little corruption. The latest health sector corruption survey (University

of Tartu, 2011) concluded that the role of informal payments is marginal; 2% of patients acknowledged having paid informally to obtain faster access to care and about 3% to have paid after getting the treatment. Overall, informal payments do not appear to be widespread or significant in magnitude. This may be because of the introduction of formal co-payments in 2002 or because of the generally low level of corruption and informal payment practices.

Recently legislated and/or planned policy reforms

In order to improve access to health care, the Estonian government has legislated additional funds to the EHIF starting from 2018. Along with these funds, EHIF will take on some extra expenditures which were so far financed from the state budget (ambulance service, HIV/AIDS treatment, dental care and others). However, these costs amount to about half of these extra funds. The remaining funds are allocated to reduce unmet need – to reduce delays. These extra funds amount to 15% increase of the EHIF budget in 2022. The base for calculating the extra funds are the pensions for non-working pensioners. The rate is 13% ⁽¹³²⁾, which is the same as the healthcare proportion of the social tax paid by the working population.

Challenges

The analysis above shows that a wide range of reforms have been implemented over the years, many quite successfully (e.g. the development of a strong primary care system that patients can easily access and which can contribute to control cost and ensure the cost-effectiveness of the systems; the development of data collection and monitoring of inputs, processes, outputs and outcomes use for decision-making), and which Estonia should continue to pursue. The main challenges for the Estonian health care system are as follows:

- To improve, as acknowledged by the authorities, the basis for more sustainable and enhanced financing of health care in the future (e.g. considering additional sources of general budget funds), with a better balance between

⁽¹³²⁾ There is a phasing-in period from 2018-2021 when the rate is lower.

resources and demand, between the number of contributors and the number of beneficiaries and which can improve access and quality of care and its distribution between population groups and regional areas. If more resources are brought into the sector it is important that they do not remain fragmented but are pooled together, maintaining the strong pooling mechanisms in place today.

- To define a comprehensive human resources strategy to ensure a balanced skill-mix, avoid staff shortages and motivate and retain staff within the sector in view of ageing and migration.
- Increasing insurance coverage to the uninsured population, while improving access, could also decrease the unnecessary use of emergency

care services (currently the only services to which uninsured individuals have access).

- To continue the efforts to gather and make more use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing.
- To continue to work on public health priorities defined in the 2009-2020 Plan and continue to enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, lack of exercise, obesity).

Table 2.8.1: Statistical Annex – Estonia

GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP, in billion Euro, current prices	11	14	16	17	14	15	17	18	19	20	20	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	18.7	19.5	19.8	18.3	15.8	16.5	17.6	18.1	17.9	18.4	18.8	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	10.0	10.9	8.4	-5.1	-14.6	2.4	7.9	4.7	2.3	3.2	1.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	19.4	13.5	-5.0	6.8	-2.7	-0.6	7.7	4.7	6.0	9.2	3.7	0.2	0.2	4.1
Expenditure on health*	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Total as % of GDP	5.0	5.4	5.6	5.6	7.0	6.7	6.2	6.3	6.5	6.7	7.1	10.2	10.1	10.1	10.2
Total current as % of GDP	4.7	4.9	5.1	5.0	6.5	6.3	5.8	5.8	6.0	6.2	6.5	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.3	0.5	0.5	0.7	0.5	0.4	0.3	0.5	0.5	0.5	0.6	0.9	0.6	0.2	0.3
Total per capita PPS	618	803	1,016	1,037	1,113	1,103	1,153	1,281	1,390	1,495	1,650	2,745	2,895	2,975	3,305
Public total as % of GDP	4.1	4.1	4.4	5.2	5.6	5.2	4.8	5.0	5.0	5.2	5.5	8.0	7.8	7.8	8.0
Public current as % of GDP	3.8	3.6	3.9	4.6	5.1	4.8	4.5	4.5	4.6	4.7	4.9	7.7	7.6	7.6	7.8
Public total per capita PPS	503	615	795	962	885	857	901	1,006	1,073	1,157	1,265	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.25	0.48	0.53	0.67	0.50	0.36	0.34	0.51	0.45	0.45	0.54	0.2	0.2	0.2	0.2
Public as % total expenditure on health	81.5	76.6	78.2	92.8	79.5	77.7	78.1	78.5	77.2	77.3	76.7	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.5	15.0	14.9	11.7	11.4	13.2	14.1	13.2	13.7	13.1	13.3	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	94.3	95.0	95.9	95.6	95.6	95.6	92.9	93.7	93.6	93.9	94.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	20.5	25.4	22.2	20.5	20.3	21.9	21.6	21.5	22.6	22.6	22.8	14.6	14.9	15.9	15.9

Notes: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	502.1	503.0	505.2	508.5
Life expectancy at birth for females	78.2	78.6	78.9	79.5	80.3	80.8	81.3	81.5	81.7	81.9	82.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	67.6	67.6	67.5	68.9	70.0	70.9	71.4	71.4	72.8	72.4	73.2	76.6	77.3	77.7	77.9
Healthy life years at birth females	52.4	53.9	54.9	57.5	59.2	58.2	57.9	57.2	57.1	57.1	56.2	62.0	62.1	61.5	63.3
Healthy life years at birth males	48.3	49.6	49.8	53.1	55.0	54.2	54.3	53.1	53.9	53.2	53.8	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	136	128	105	90	79	74	255	252	240	235	224	64	138	131	127
Infant mortality rate per 1 000 live births	5.4	4.4	5.0	5.0	3.6	3.3	2.5	3.6	2.1	2.7	2.5	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics	EU- latest national data														
Composition of total current expenditure as % of GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	1.7	1.5	1.5	1.8	1.8	1.7	1.5	1.5	1.5	1.5	1.6	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.0	1.1	1.2	1.3	1.8	1.8	1.7	1.7	1.8	1.9	2.0	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.2	1.2	1.1	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.5	1.4	1.4	1.7	1.8	1.7	1.5	1.5	1.5	1.5	1.6	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.8	0.8	1.0	1.1	1.4	1.2	1.2	1.2	1.2	1.3	1.3	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.5	0.5	0.5	0.5	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.8.2: Statistical Annex - continued – Estonia

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	35.1%	30.9%	30.2%	35.7%	27.2%	26.5%	26.1%	25.9%	24.9%	24.8%	24.1%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	1.9%	1.8%	2.0%	2.5%	2.0%	1.9%	1.9%	1.9%	2.0%	2.7%	2.9%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	21.8%	22.9%	23.6%	27.0%	28.1%	28.0%	28.4%	28.5%	30.2%	30.1%	30.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	25.4%	24.2%	21.8%	25.2%	20.0%	20.5%	19.9%	20.1%	19.3%	18.7%	18.3%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	3.0%	3.7%	3.3%	3.8%	2.8%	2.8%	3.1%	2.9%	3.3%	2.6%	2.6%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.5%	2.7%	2.7%	3.2%	3.2%	3.5%	3.3%	3.6%	3.0%	3.1%	3.2%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	3.2%	2.9%	2.6%	2.6%	2.1%	2.2%	2.4%	2.1%	2.0%	2.1%	1.8%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	39.5%	38.6%	36.2%	36.5%	34.5%	34.1%	33.6%	33.1%	32.2%	32.1%	31.4%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	2.4%	2.4%	2.6%	2.5%	2.5%	2.3%	2.5%	2.6%	2.6%	3.4%	3.7%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	21.5%	22.6%	24.5%	24.6%	26.5%	25.4%	25.7%	26.2%	27.0%	27.0%	27.2%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	13.9%	13.2%	12.1%	11.9%	13.1%	13.6%	13.2%	13.4%	13.2%	13.0%	12.4%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.8%	1.7%	1.6%	1.8%	1.6%	1.9%	1.8%	1.8%	2.2%	1.3%	1.2%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.4%	2.8%	2.8%	3.3%	2.2%	2.7%	2.5%	2.7%	2.0%	2.3%	2.4%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	4.5%	3.6%	3.4%	2.9%	2.7%	2.9%	3.1%	2.7%	2.4%	2.6%	2.4%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.22	0.37	0.52	0.82	0.75	0.82	0.97	0.98	1.14	1.14	1.22	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.7	0.7	0.5	0.5	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	0.7	0.7	1.1	1.5	1.5	1.6	1.6	1.7	1.9	2.0	1.7	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	15.9	:	18.0	:	16.9	..	19.0	:	19.7	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	27.8	:	26.2	:	26.2	:	26.0	:	22.1	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	13.1	13.4	14.7	14.2	11.9	11.4	11.6	12.1	11.9	11.1	10.3	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	317	319	326	333	327	322	326	328	328	332	342	324	330	338	344
Practising nurses per 100 000 inhabitants	633	632	640	640	613	608	618	617	557	565	601	837	835	825	833
General practitioners per 100 000 inhabitants	69	69	70	72	71	73	74	74	70	72	71	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	6.3	6.4	6.6	6.6	6.3	6.1	6.4	6.3	6.4	6.3	6.4	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	18	18	18	18	17	17	17	17	17	17	17	17	16	16	16
Day cases discharges per 100 000 inhabitants	3,886	4,814	5,916	6,061	5,921	6,080	6,852	8,044	7,021	7,862	:	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	69.0	71.0	71.9	70.1	68.2	70.8	71.0	69.1	69.4	69.1	67.0	77.1	76.4	76.5	76.8
Hospital average length of stay	6.0	5.9	7.9	7.8	7.7	7.6	7.7	7.9	7.5	7.6	7.6	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	12.2	14.2	16.2	16.8	25.3	25.8	28.2	31.8	29.0	31.7	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.3	5.2	5.1	5.2	5.3	5.4	5.5	5.6	5.6	5.6	5.6	5.6	0.3	0.9	5.6
AWG risk scenario	5.3	5.3	5.4	5.6	5.8	6.0	6.2	6.3	6.4	6.4	6.5	6.4	1.1	1.6	1.6
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	-10.3	2.0	2.0

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.9. FINLAND

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

Finland, member of the European Union since 1995, has a population of around 5.5 million inhabitants, which is slightly above 1% of the EU population in 2016 ⁽¹³³⁾. It is expected to reach 5.6 million in 2070, a demographic expansion of 2%. With a GDP of around €10 billion, or 28,300 PPS per capita it is slightly below the EU average GDP per capita for the most recent year of 2015.

Total and public expenditure on health as % of GDP

Total expenditure ⁽¹³⁴⁾ on health as a percentage of GDP (9.9% in 2015) has increased over the last decade (from 8.3% in 2005), below the EU average ⁽¹³⁵⁾ of 9.9%. Public expenditure has increased as well 6.3% in 2005 to 7.4% of GDP in 2015. It is also below the EU average of 8% in 2015. Looking at health care without long-term care ⁽¹³⁶⁾ reveals a similar picture with public spending being below the EU average (6.1% vs 6.8% in 2015). According to the authorities, the main factors explaining the growth of health expenditure are the increased costs of specialised care and pharmaceuticals.

When expressed in per capita terms, total spending on health at 3,216 PPS in Finland is slightly below the EU average of 3,305 in 2015, as is public spending on health care: 2,400 PPS vs. an average of 2,609 PPS in 2015.

Expenditure projections and fiscal sustainability

As a consequence of demographic and other changes, health care expenditure is projected to

increase by 0.8 pps of GDP by 2070, slightly below the average growth expected for the EU (0.9) ⁽¹³⁷⁾, according to the Reference Scenario. When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.4 pps of GDP from now until 2070 (EU value: 1.6).

Finland does not appear to face fiscal sustainability risks in the short run. There are low fiscal sustainability risks in the medium term, but medium risks in the long term, primarily related to the projected ageing costs ⁽¹³⁸⁾.

Health status

Life expectancy at birth (84.4 years for women and 78.7 years for men in 2015) is close to the respective EU averages (83.3 and 77.9 years of life expectancy in 2015) ⁽¹³⁹⁾. However, healthy life years, at 56.3 years for women and 59.4 years for men, were below the EU averages of 63.3 and 62.6 in 2015. The infant mortality rate of 1.7‰ is lower than the EU average of 3.6‰ in 2015, having gradually fallen over most of the last decade (from 3‰ in 2005).

As for the lifestyle of the Finnish population, the data indicates a fall in the proportion of the regular smokers (from 21.8% in 2005 to 17.4% in 2015), below the EU average of 20.9 in 2015). Over the same period the proportion of the obese in the population has increased (from 14.1% in 2005 to 18.8% in 2015). Alcohol consumption has decreased since 2009, when it was 10 litres per capita, to 8.8 in 2015 below the EU average of 10.2.

System characteristics

Coverage

Finnish municipalities and their co-operation networks are required to provide social and health

⁽¹³³⁾ According to Eurostat population projections.

⁽¹³⁴⁾ Please note that these figures reflect current (from System of Health Accounts) plus capital expenditure (from the COFOG database) in contrast to OECD and EUROSTAT data series, which reflect only current expenditure.

⁽¹³⁵⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹³⁶⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹³⁷⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽¹³⁸⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽¹³⁹⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

care services, including essential public health services and actions, to their resident citizens.

The provision of health care by the municipalities is complemented by the Finnish statutory health insurance, which covers the entire population, and includes both medical care insurance and earned income insurance.

KELA, the Social Insurance Institution of Finland is in charge of health insurance. This insurance reimburses patients for tests and treatments prescribed by private doctors and dentists as well as for any charges paid according to statutory reimbursement rates. Costs in excess of the statutory reimbursement rate are paid by patients. The insurance is financed 44.9/55.1 from taxation and contributions. Contributions to this insurance are deducted from the taxable income, benefits and/or pension of the insured.

Earned income insurance covers other benefits such as allowances for sickness, rehabilitation, children's special care, and maternity/paternity.

Administrative organisation and revenue collection mechanism

From a financial point of view, the Finnish health care system has three main parts: municipal health care services (primary and specialised health services), private health services and occupational health services.

An integrated but decentralised system of municipal health care services, funded on the basis of taxes (central and local taxes and for a small part client fees), provides full population coverage. On the basis of legal provisions (harmonised legislation and guidelines), the 311 municipalities (in 2018, compared to 415 in 2008) are responsible for providing or funding a wide range of health services (including health promotion, disease prevention and rehabilitation) for their residents (still less than 10 000 in the majority of municipalities). Primary care is provided by individual municipalities or by groups of municipalities whereas the specialised health care is organised through federations of municipalities. This is coupled with a compulsory national medical insurance (run by KELA, the Social

Insurance Institution) covering all residents ⁽¹⁴⁰⁾, financed through the state (45%) and the insured (55%). This covers part of patients' expenditure on outpatient drugs, transportation costs but also part of private health care (mainly outpatient visits and ambulatory care). Use of private health services represented 5.5% of total health expenditure in 2015. In addition, employers provide/buy occupational health care services predominantly preventive and first aid care, but also basic outpatient care for common illnesses especially in the case of larger companies. The role of compulsory occupational health care is significant, as it covers around one third of the total population. Supplementary private health care insurance is available but has only a minor role.

Role of private insurance and out of pocket co-payments

Preventive and promotive services are mostly free of charge and used widely. However, users pay an out-of-pocket fee for the use of ambulatory and hospital services, including laboratory tests and scans. The maximum fees are set by central government every other year. Users are further protected by an annual ceiling, above which they are able to use of all municipal health services without further fees.

Most municipal health services (primary, outpatient specialist care, hospital day case and inpatient care, dental care, physiotherapy) involve a fee at the point of use. Children and those who have reached an upper limit for out-of-pocket payments are exempted from cost-sharing. Use of child clinics, including vaccinations, and maternity services is free of charge. The occupational health care is free of charge to the employee. Under the national medical health insurance the cost-sharing applies to pharmaceuticals and many private health care services (see the previous paragraph). Eyeglasses and contact lenses are, for example, not funded or provided by local or state authorities.

Reimbursement for pharmaceutical outpatient prescriptions is calculated as a percentage of the medicine's reference price. Patients enjoy a fixed deduction due to any travel expenses as well as the

⁽¹⁴⁰⁾This is a part of the national health insurance scheme that covers both the medical insurance and the sickness and parenthood allowances scheme.

cost of prescribed medicines. Again, an annual ceiling is set on the maximum amount that patients pay for prescriptions and travel expenses.

11.4% of the population buys supplementary private insurance (to cover the services not covered by public provision/ funding) and 11.5% buys complementary health insurance to cover cost-sharing. If cost-sharing is fully covered by private insurance it may lose the ability to reduce overconsumption and/or encourage some services more than others, although complementary insurance is taken by a relatively small share of the population.

In 2015, private expenditure and out-of-pocket expenditure were 25% and 19.9% of total health expenditure and therefore above the EU average (21.6% and 15.9%).

To improve access and reduce the waiting times for primary care, legislation was introduced which establishes the right to immediate access to health centres by phone or a visit during working hours and evaluation of the person's health care needs within 3 working days. To reduce waiting times for hospital surgery, which was seen as a problem in Finland, legislation provides that a non-urgent referral must be assessed within 3 weeks and hospital treatment provided within 6 months. When this is not possible, patients can be treated in another hospital district or in the private sector at the authorities' expenses. In many areas there are phone services and web pages in place to help patients access the system. Waiting times have seen a reduction since these systems have been implemented. Some hospital districts provide online data on waiting times. In addition, the National Institute for Health and Welfare publishes general statistics on waiting times.

Types of providers, referral systems and patient choice

Primary care is provided by general practitioners (GPs) in municipal public health centres while outpatient specialist care is provided in outpatient hospital departments. In larger cities the public health centres also provide outpatient specialist services. Federations of municipalities form hospital districts (20 districts in total excluding the Åland Island) and own public hospitals. About 89% of all hospital beds are public. The 20

hospital districts are further grouped into 5 tertiary care regions around universities with medical schools. Private provision, often through group practices, mostly concerns outpatient specialist and simple ambulatory services, and typically takes place in urban areas. Private physicians can, however, refer patients to public hospitals. Of physicians, 70% work in the public and 30% in the private sectors. Of all physicians working in the public sector, 24% work also on a part time basis in the private sector outside office hours. The proportion of GPs who work in the public health centres and have a private practice outside office hours is 12%.

The number of licensed physicians per 100 000 inhabitants in Finland is, at 321 in 2014, below but close to the EU average of 343 in that year. It has increased continuously since 2001. The number of general practitioners (GPs) per 100 000 inhabitants was 125 in 2015, above the EU average of 78.3. The number of nurses per 100 000 inhabitants (1466 in 2014) was far above the EU average of 829.

Authorities acknowledge shortages of staff in some specialties and in some geographic areas. A shortage of GPs in certain municipalities may explain longer waiting times to see a GP. Staff supply is regulated in terms of quotas for medical students but not in terms of the location of physicians. The GP shortage has been addressed by redistribution of professional responsibilities in primary care between physicians and public health nurses. The effectiveness of this measure is unclear at this stage.

Authorities have made some efforts to use primary care vis-à-vis specialist and hospital care. While residents are free to contact a GP, there is in municipal health care a compulsory referral system from primary care to specialist doctors i.e. GPs act like gatekeepers to specialist and hospital care. However, in some areas, shortages in GPs may have led to perceived long waiting times for GP visits and therefore led to unnecessary visits to specialists or emergency departments.

Choice of GP, specialist and hospital is allowed but limited. Increasing patient choice is, in fact, a priority of national authorities.

The number of acute care beds per 100 000 inhabitants (305 in 2015) is below the EU average of 402 for that year. It has consistently decreased in recent times (372 in 2005) and stands as one of the lowest in the EU. There appears to be no regulation in terms of increases in hospital capacity or equipment capacity. Hospitals have autonomy to recruit medical staff and other health professionals. Private hospitals are free to establish and expand their capacity in compliance with quality and safety requirements.

Treatment options, covered health services

The Ministry of Social Affairs and Health defines general policy guidelines and regulation, but there is not a defined basic benefit package. The Council for Choices in Health Care at the Ministry of Social Affairs and Health provides recommendations on which treatments and other health technologies methods are included in the range of health services provided by public funding in Finland.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Public sector physicians (GPs and specialists) are paid a salary. The pay scale for medical staff and other health professionals is set at national level. The labour unions negotiate with the Commission for Local Authority Employers over salaries. The Government does not have a role in this procedure. Physicians are not eligible to receive bonuses regarding their activity or performance, although a small share of the salary of dentists and primary care physicians is paid following a fee-for-service principle. Of physicians 70% work in the public and 30% in the private sectors. Physicians who work in the public sector may also practice in the private sector based on the approval of the (public) employer. Of all physicians working in the public sector, 24% work also on a part time basis outside their office hours in the private sector. The proportion of GPs who work in the public health centres and have a private practice outside office hours is 12%. This is considered to be a measure to increase access.

The municipalities remunerate the hospital districts for their services. In most hospital districts some type of payment per case basis using DRGs is in

use. Hospital remuneration methods are negotiated at local level.

When looking at hospital activity, inpatient discharges (16.9 per 100 inhabitants in 2015) are above the EU average (16.2) while the number of day case discharges, at 5,174 in 2015, is below the EU average of 7,635. The proportion of surgical day case discharges amongst all procedures conducted was 23.2% in 2015, being below the EU average (32.3%). Acute average length of stay (9.4 days in 2015) is above the EU average (7.6 days in 2015).

The market for pharmaceutical products

The authorities have implemented a large number of policies to control expenditure on pharmaceuticals. As a new method for controlling uncertainty linked to total costs, cost-effectiveness and therapeutic value of new medicines, Finland has taken into use a so called conditional reimbursement for medicines, a Finnish model for risk sharing agreement. The provisions on conditional reimbursement based on pilot legislation will remain valid for a fixed term, to the end of year 2019.

Initial price is based on clinical performance, economic evaluation, the cost of existing treatments and international prices (EEA countries). The government has used price cuts and there is a positive list of reimbursed products which is based partly on health technology assessment information when available. Decisions on reimbursement are temporary in nature, which enables the reimbursement to be adapted to changes in the market. Generics are priced at -50% of the originators price and biosimilars at -30%. Authorities promote rational prescribing of physicians through treatment guidelines complemented with monitoring of prescribing behaviour and education and information campaigns on the prescription and use of medicines. The structure of co-payments changed in 2006 so that the co-payment is now a share of the medicine's cost rather than a fixed amount for any "visit" to the pharmacy, which appears to have encouraged patients to buy excessive quantities of medicines. There is an explicit generics policy. Prescription by active element is in place although its application is rare. Nevertheless, pharmacies are obliged to provide advice on the prices of

medicines and dispense the cheaper product and replace the prescription by a generic medicine if available. Generics face a fast track registration and lower registration fees. Patients aware of the generic substitution appear to request cheaper medicines and electronic systems allow doctors (and therefore the patients) to access the prices of medicines when prescribing medicines. Generic substitution is particularly important when patients have to incur a large share of the cost. In April 2009, reference pricing was introduced. The reimbursement is based on the reference price that is the price of the cheapest substitutable product plus a small premium. If the patient chooses a product whose retail price exceeds the reference price, he/she must pay the share above the reference price. Both generic substitution and reference pricing systems have had notable downward effects on the pharmaceutical expenditure. Authorities (through KELA, the Social Insurance Institution) monitor the general consumption of prescribed medicines closely and evaluate the budgetary impact of generic substitution.

Public pharmaceutical spending as a proportion of current health spending fell from 10.9% in 2005 to 9.4% in 2015. It is below the EU average of 12.7% for that year.

E-Health, Electronic Health Record

The coverage of electronic patient records has been 100 % in Finland for many years now. Finland has also introduced a nationwide harmonised electronic patient record (Patient Data Repository), an electronic prescription, a citizens' health portal (My Kanta pages) and a national medicine record (Pharmaceutical Database). These initiatives have been a part of the National Archive of Health Information –project (Kanta).

The electronic prescription is in use by both public and private organisations and the coverage is in public organisations nearly 100 %. Electronic prescription is mandatory as of 1.1.2017. All public organisations are connected to the Patient Data Repository and private organisations are starting to participate in 2016. This allows sharing of data between healthcare providers securely and with patient consent. Citizen's health portal enables patients to inspect their electronic prescriptions and health records, log data, give

consent and denials and make advanced directives (e.g. living will). The national medicine record provides regularly updated information for physicians and pharmacies about e.g. the cost, reimbursement eligibility and substitutability of pharmaceuticals. Modernisation of electronic health record systems and other health/hospital/patient access systems is moving forward. Finland also has a national eHealth -strategy for information management and ICT-development.

Health and health-system information and reporting mechanisms/ Use of Health Technology Assessments and cost-benefit analysis

Finland has an extensive information management and statistics systems and comprehensive data is gathered on physician and hospital activity and quality and health status. Hospital benchmarking data is available allowing for costs and efficiency comparisons. Existing clinical guidelines and practice protocols are coupled with the monitoring of physician activity and feedback to physicians (for example on their prescription behaviour) to encourage compliance with those guidelines. Through surveys, authorities collect information on patient's experience and satisfaction with the care obtained.

The Centre for Health and Social Economics (CHESS) at the National Institute for Health and Welfare undertakes high-quality health economics research on issues relevant for health policy. CHESS focuses on quality and efficiency of health services, financing and provision of health services and evaluation of health services system. The Pharmaceuticals Pricing Board confirms the reimbursement (including the level of reimbursement) and a reasonable wholesale price for pharmaceuticals, including outpatient prescription pharmaceuticals.

The Parliament, the Government through the Ministry of Health, and municipalities set public health priorities in terms of outcomes and the reduction of health inequalities. For example, a shared project of the National Institute for Health and Welfare and the Finnish Institute of Occupational Health (the TEROKA project) aims aimed to develop information on health inequalities and to promote the reduction of

inequalities. As section 1 suggests there are indeed a number of risk factors that can translate into an important burden of disease and financial costs. Authorities have strongly emphasised health promotion and disease prevention measures in recent years as well as emphasising the important contribution other policy areas can make to improve the health of the population ("Health in all Policies"). Recent legislation will define more explicitly the promotion and preventive services to be provided at municipal level. Promotion and prevention are seen by authorities as a means to ensure long-term fiscal sustainability of the health budget: they reduce the development of disease; the need for care; and, the consequent need for funding.

Public expenditure on prevention and public health services as a % of GDP was above the EU average 3.4% vs. 3.2% in 2015. This was also the case as a % of total current health expenditure (4% vs. the EU average of 3.1% in 2015).

Recently legislated and/or planned policy reforms

On April 5 2016 the Finnish Government published its detailed position, which will guide the drafting of legislation on three interconnected reforms: (1) the reform of the organisation of health and social services, (2) the reform relating to freedom of choice and multisource financing, and (3) the regional government reform, i.e. the establishment of 18 independent counties governed by elected county councils.

The goals of these reforms are to (1) reduce the currently forecasted public fiscal sustainability gap by €3 billion by 2030, (2) guarantee equal access to high quality services everywhere in the country and (3) reduce health inequities.

The health and social reform is based on a client-centred integration of health and social services as the key measure for narrowing health and wellbeing disparities, improving the effectiveness of the services in an equal manner and bringing cost savings. A single strong organiser, county, will be responsible for services, steering, official activities, evaluation of regional impact, cost-effectiveness and quality services as well as supporting the users' freedom of choice. Freedom in the choice of choice of services, will enable

users themselves to make choices between the providers.

The county will have a single budget and a single financial management and it will produce the necessary health and social services itself or together with other counties, or it may rely on private or third sector in the provision of services. Counties will be financed by the central government and the current multisource financing will be simplified in later phases of the reform. The relevant perspectives of European Union law and the realisation of fundamental rights will be taken into account in the legislative drafting.

Counties will ensure that the organisation and provision of services are genuinely separated and performed by different organisations (legal persons). Freedom of choice will significantly promote competition in the provision of services. Integration of information systems will increase information flows between different providers. Consequently, the integration of service chains will improve. Essential public health functions, including health promotion and disease prevention, will be ensured.

The decision entails a major shift of paradigm and will require additional planning to that already carried out at earlier phases of the reform preparations.

The draft laws will be voted in the parliament in 2019 after the constitutional assessment. The new legislation is planned to come into force in 2019. The new health and social care system itself, is due to commence on 1 January 2021. In preparation, the Government has introduced Bills to the parliament ranging from the Counties Act to the Freedom of Choice legislation. The latter is planned to come into force in stages during 2021-2023. An election of the county councils will follow in Spring 2019. The voting in the Parliament is expected to be tight. If the laws are not accepted in the Parliament, the preparation of the reform continues during the next electoral period.

Successful and skilful change management will be a prerequisite for achieving the targets and thus will receive particular attention during the reform implementation.

Challenges

The analysis above shows that a wide range of reforms have been implemented over the years, to a large extent successfully (e.g. to reduce waiting times, to improve hospital efficiency, to improve data collection and monitoring, to control pharmaceutical expenditure), and which Finland should continue to pursue. The main challenges for the Finnish health care system are as follows:

- To ensure greater coherence between the sources of financing so that they reinforce equity and efficiency in the system.
- To ensure consistency in the provision of health care by different municipalities, ensuring equity of access and cost-effectiveness.
- To enhance primary care provision by increasing the numbers and spatial distribution of GPs and nurses and by rendering referral system to specialist care more effective.
- To consider whether it is worth introducing some element of performance related payment physicians' remuneration (e.g. through the use of mixed payment schemes) to encourage health promotion, disease prevention and disease management activities or the treatment of vulnerable populations and increase outpatient output and render primary care more attractive. More generally, to ensure sufficient numbers of staff in view of ageing of staff and population.
- To increase hospital efficiency by increasing the use of day case surgery and increasing the supply of follow-up care for long-term care patients so as to reduce the unnecessary use of acute care settings for long-term care patients. In addition, measures pursued in recent years should be consolidated to reduce duplication and improve efficiency and quality in the hospital sector (e.g. concentration and specialisation of hospitals within regions).
- To ensure a greater use of health technology assessment to determine new high-cost equipment capacity as well as the benefit basket and the cost-sharing design across medical interventions as is currently done with medicines.
- To further enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, obesity) in various settings (at work, in school).
- To tackle the increased waiting times found in some areas, especially by distributing healthcare staff more efficiently.
- To track the fiscal sustainability of the healthcare system and ensure that the medium and long-term risks are accounted for. All the potential cost-drivers should be considered and dealt with.

Table 2.9.1: Statistical Annex – Finland

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP , in billion Euro, current prices	164	173	187	194	181	187	197	200	203	205	210	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	29.7	30.8	32.7	32.3	28.9	29.6	29.9	29.1	28.0	27.7	28.3	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	2.4	3.7	4.7	0.3	-8.7	2.5	2.1	-1.9	-1.2	-1.1	-0.2	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	4.4	2.2	3.6	0.4	2.1	2.7	2.6	0.9	-1.3	-0.3	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.3	8.4	8.2	8.4	9.3	9.2	9.3	9.7	9.9	9.9	9.9	10.2	10.1	10.1	10.2
Total current as % of GDP	8.0	8.0	7.8	8.1	8.9	8.9	9.0	9.3	9.5	9.5	9.5	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.9	0.6	0.2	0.3
Total per capita PPS	2,213	2,331	2,449	2,614	2,674	2,739	2,887	3,048	3,155	3,167	3,216	2,745	2,895	2,975	3,305
Public total as % of GDP	6.3	6.3	6.1	6.3	7.0	6.9	7.0	7.4	7.5	7.5	7.4	8.0	7.8	7.8	8.0
Public current as % of GDP	6.1	6.0	5.9	6.0	6.6	6.6	6.7	7.0	7.1	7.1	7.0	7.7	7.6	7.6	7.8
Public total per capita PPS	1,689	1,759	1,844	1,967	2,016	2,051	2,179	2,321	2,401	2,404	2,400	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.26	0.31	0.29	0.29	0.35	0.31	0.31	0.38	0.41	0.41	0.34	0.2	0.2	0.2	0.2
Public as % total expenditure on health	76.3	75.5	75.3	75.2	75.4	74.9	75.5	76.2	76.1	75.9	74.6	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.1	14.3	15.0	14.8	14.5	14.7	15.0	14.8	14.4	14.1	12.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	19.2	19.7	19.8	19.6	19.4	20.0	19.4	18.7	19.0	19.0	19.9	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	5.2	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.5	5.5	502.1	503.0	505.2	508.5
Life expectancy at birth for females	82.5	83.1	83.1	83.3	83.5	83.5	83.8	83.7	84.1	84.1	84.4	82.6	83.1	83.3	83.3
Life expectancy at birth for males	75.6	75.9	76.0	76.5	76.6	76.9	77.3	77.7	78.0	78.4	78.7	76.6	77.3	77.7	77.9
Healthy life years at birth females	52.5	52.8	58.0	59.5	58.6	57.9	58.3	56.2	:	57.5	56.3	62.0	62.1	61.5	63.3
Healthy life years at birth males	51.7	53.2	56.8	58.6	58.2	58.5	57.7	57.3	:	58.7	59.4	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	62	60	57	54	54	51	130	125	118	114	111	64	138	131	127
Infant mortality rate per 1 000 live births	3.0	2.8	2.7	2.6	2.6	2.3	2.4	2.4	1.8	2.2	1.7	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.1	2.0	1.9	2.0	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.3	2.4	2.3	2.4	2.7	2.7	2.7	2.8	2.9	3.0	3.2	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.9	1.8	1.7	1.8	2.0	2.0	2.0	2.1	2.2	2.2	2.0	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.7	1.7	1.7	1.7	1.9	1.9	1.9	2.0	2.1	2.1	2.3	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.7	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	:	:	:	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.9.2: Statistical Annex - continued – Finland

Composition of total as % of total current health expenditure												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	26.1%	25.0%	24.4%	24.8%	24.6%	24.8%	25.3%	25.2%	25.4%	25.1%	23.8%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	1.4%	1.6%	1.5%	1.5%	1.5%	1.6%	1.7%	1.7%	1.8%	1.8%	1.8%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	28.7%	29.8%	29.6%	29.7%	30.2%	30.6%	29.6%	29.8%	30.9%	31.4%	33.5%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	16.1%	14.6%	14.7%	14.6%	14.1%	13.5%	13.0%	12.6%	12.4%	12.3%	12.6%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	2.6%	2.8%	2.7%	2.5%	2.5%	2.6%	2.5%	2.3%	2.2%	2.3%	2.3%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	3.6%	3.5%	3.8%	3.6%	3.4%	3.3%	3.2%	3.3%	3.4%	3.4%	4.0%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	2.4%	2.5%	2.2%	2.1%	1.9%	1.8%	1.6%	1.6%	1.6%	1.6%	0.8%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	31.5%	30.2%	29.6%	30.0%	29.7%	29.9%	30.5%	30.1%	30.7%	30.3%	28.7%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	1.6%	1.8%	1.7%	1.8%	1.8%	1.8%	1.9%	2.0%	2.1%	2.0%	2.3%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	28.2%	28.9%	28.7%	28.5%	29.0%	29.3%	27.8%	28.1%	29.5%	30.0%	32.6%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	10.9%	10.7%	10.4%	10.6%	10.4%	9.9%	9.6%	9.3%	8.8%	9.0%	9.4%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	:	:	:	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.8%	3.0%	3.2%	3.1%	2.9%	2.7%	2.7%	2.6%	2.7%	2.7%	3.4%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	3.0%	3.0%	2.7%	2.6%	2.3%	2.1%	1.9%	1.9%	1.8%	1.8%	0.9%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	1.47	1.52	1.53	1.56	1.57	1.86	2.02	2.16	2.21	2.33	2.59	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	2.0	:	2.3	2.4	2.1	2.0	1.9	2.0	1.5	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.5	1.5	1.7	:	2.0	2.1	2.1	2.2	2.2	2.1	2.2	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.1	0.1	:	:	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.2
Proportion of the population that is obese	14.1	14.3	14.9	15.7	14.9	15.6	16.6	15.8	15.7	17.8	18.8	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	21.8	21.4	20.6	20.4	18.6	19.0	17.8	17.0	15.8	15.4	17.4	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	10.0	10.2	10.5	10.3	10.0	9.7	9.8	9.2	9.0	8.8	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	263	268	269	272	283	299	299	307	315	321	:	324	330	338	344
Practising nurses per 100 000 inhabitants	1257	1315	1340	1314	1356	1386	1408	1420	1443	1466	:	837	835	825	833
General practitioners per 100 000 inhabitants	101	102	101	103	102	119	123	122	126	131	125	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	4.3	4.3	4.2	4.3	4.2	4.3	4.2	4.2	4.2	4.2	4.3	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	20	20	19	19	18	18	18	:	17	17	17	17	16	16	16
Day cases discharges per 100 000 inhabitants	5,552	5,403	5,429	5,434	5,332	5,473	5,547	:	5,323	5,240	5,174	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	7.1	7.2	13.1	12.6	12.7	11.8	11.4	11.2	10.8	10.6	9.4	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	21.6	21.6	22.2	22.4	22.4	23.2	23.6	:	23.5	23.4	23.2	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	6.1	6.2	6.4	6.5	6.6	6.6	6.7	6.7	6.7	6.7	6.8	6.9	Finland	EU	
AWG risk scenario	6.1	6.3	6.5	6.6	6.8	7.0	7.1	7.2	7.2	7.3	7.4	7.5	0.8	0.9	
													1.4	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	5.5	5.6	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.6	5.6	Finland	EU	
													2.5	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.10. FRANCE

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

France has a population of almost 66.8 million inhabitants, which is expected to grow by 15% up to 77 million by 2070, above the EU overall growth of 2%. With a GDP of more than €2,194 bn in 2015, or 29,200 PPS per capita, it is slightly below the EU average GDP per capita of €29,600 PPS.

Total and public expenditure on health as % of GDP

Total expenditure ⁽¹⁴¹⁾ on health as a percentage of GDP (11.7% in 2015) has increased over the last decade (from 10.6% in 2005) and is above the EU average ⁽¹⁴²⁾ of 10.2%. Public expenditure has increased as well: from 8.4% in 2003 to 9% of GDP in 2015, above the EU average of 8%. Looking at health care without long-term care ⁽¹⁴³⁾ reveals a similar picture with public spending being above the EU average (7.7% vs 6.8% in 2015).

When expressed in per capita terms, total spending on health at 3451 PPS in France is above the EU average of 3305 in 2015. So is public spending on health care: 2647 PPS vs. an EU average of 2609 PPS in 2015.

Expenditure projections and fiscal sustainability

As a consequence of demographic changes, health care expenditure is projected to increase by 0.5 pps of GDP, in line with the average growth expected for the EU ⁽¹⁴⁴⁾, according to the "AWG reference

scenario". When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.2 pps of GDP from now until 2070 (both below the EU average).

France faces low fiscal sustainability risks in the short run. There are high risks for the country from debt sustainability analysis in the medium term, but the contribution of health care and long-term care is relatively small. Finally, according to the new risk classification methodology of the 2018 Fiscal Sustainability Report, long-term risks are medium ⁽¹⁴⁵⁾.

Health status

Life expectancy at birth (85.5 years for women and 79.2 years for men in 2015) and healthy life years (64.6 years for women and 62.6 years for men) are above the respective EU averages (83.3 and 77.9 years of life expectancy in 2015, 63.3 and 62.6 in 2015 for the healthy life years) ⁽¹⁴⁶⁾. An infant mortality rate of 3.7‰ is slightly above the EU average of 3.6‰ in 2015.

System characteristics

Coverage

The French system is a social health insurance system in which all legal residents have to register with the public health insurance program (sickness insurance funds) and provides universal population coverage. The universal coverage is given, first, on the professional/ occupational basis and secondly, since 2000, on the basis of residence.

The system is based on the principles of solidarity and the guarantee of financial protection against life's contingencies for everyone. The basic (though comprehensive in scope) social health insurance system had three dominant schemes – the general health insurance scheme, the agricultural scheme and the national insurance fund for self-employed non-agricultural workers –

⁽¹⁴¹⁾ Please note that these figures reflect current (from System of Health Accounts) plus capital expenditure (from the COFOG database) in contrast to OECD and EUROSTAT data series, which reflect only current expenditure.

⁽¹⁴²⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹⁴³⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹⁴⁴⁾ I.e. considering the "reference scenario" of the projections (see The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf).

⁽¹⁴⁵⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽¹⁴⁶⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

brought together under the National Union of Sickness Insurance Funds (UNCAM) since 2004.

These funds are not allowed to define the benefit basket, the level of coverage or premiums, and risk-equalisation is in place. In addition to the basic social insurance scheme (financed by social security contributions and taxation), more vulnerable households (i.e. with a yearly income below €8,645 for a single person in 2015, €15,560 for a 3-person household) ⁽¹⁴⁷⁾ benefit from free complementary sickness insurance – "Complementary Universal Health Coverage" (CMUC), an effort by authorities to improve access to health insurance and therefore to health care by those more vulnerable groups. In order to avoid a threshold effect, if the income exceeds the threshold to the limit of 35%, the government finances a part of the premium paid by the insured for complementary insurance.

More and more people are also covered by private voluntary health insurance. 96% of the population is covered by complementary (to cover for patients' cost-sharing for public goods and services) and supplementary (to cover the services not covered by public provision/ funding) voluntary health insurance by individual initiative (57%) or in the context of employment (43%).

Administrative organisation and revenue collection mechanism

The Parliament and the central government set the level of taxes and social contributions financing basic health insurance. The Parliament also sets the total public budget for health and by type of care. The central government determines resource allocation across the regions and the payment methods of hospitals. Fees are defined in agreements negotiated between public health insurance funds and physicians unions. While the State plays the steering role in administering the system, some decentralisation has been introduced during the 1990's to give more responsibilities to regional authorities in the planning and financial resource allocation for hospitals.

This system involves a strong collaboration between the entities of the system. The legitimacy of the social partners in the management of the

health insurance funds and their role with regard to the role of the state was, for example, one of the questions that have been raised often in the past. Over time, the balance tends to shift towards increasing state intervention. However, the division of responsibilities between the central government and the regions remains unclear in certain areas and could, therefore, benefit from further clarification to avoid conflict relations between the state authorities and the health insurance funds and improve the efficiency in running the health sector.

The number of actors involved in decision making may partly explain why public expenditure on health administration and health insurance as a percentage of GDP (0.34% and as a % of current health expenditure (3.9%) is above the EU average (respectively 0.26% and 3.4%), amongst the highest in the Union in 2015. This shows that there is perhaps scope to reduce administrative costs and improve the general management of the sector despite current efforts. The setting up of the Regional Health Agency (ARS), in 2010, can certainly contribute to enhance the efficiency in running the health sector. For instance, the ARS aims at improving care coordination between outpatient and inpatient care and at optimising the regional health care supply.

In France, a non-mandatory national health care spending target (ONDAM) is voted each year by the Parliament as part of the social security budget law (Loi de financement de la sécurité sociale – LFSS). Compliance with this target has been met for the 8th year in a row in 2017 and, according to the warning committee's report of 15th October 2018, the 2018 target should be met.

This is mostly explained by restrained growth in outpatient care spending, in particular reductions in pharmaceutical prices (detailed in the Lois de financement de la Sécurité sociale - LFSS) and measures to promote generic and biosimilar medicines. These measures include the implementation of incentive payments for general practitioners, specialists and pharmacists in 2012 (Rémunération sur objectifs de santé publique – ROSP) with prescribing targets, renewed and strengthened ever since. Patients were also given a larger incentive to accept the substitution for generic drugs with the "tiers payant contre générique" measure: patients have to wait to be

⁽¹⁴⁷⁾ See the official website of the CMU fund: www.cmu.fr.

reimbursed the cost of their prescription from the Social Insurance if they do not wish to be dispensed the generic. In parallel, the development of ambulatory care was promoted.

Although the ONDAM is not a budgetary ceiling, several monitoring and tracking levers, strengthened recently (especially after the 2010 Briet report) are used to ensure it continues to be respected. First, spending is monitored closely by an independent “warning committee”, composed of 3 experts whose role is to give, three times a year, an opinion on progress towards the target and on the risks of overshooting. Second, there has been a gradual reduction of the warning threshold (amount above which the government must take corrective measures to ensure compliance with the target) from 0.75% of the target in 2010 to 0.7% in 2011, then to 0.6% in 2012 and finally to 0.5% in 2013. Finally, in late 2010, a monitoring committee co-chaired by the ministers of Health and Budget was implemented. This committee is assisted by a statistical group in charge of reviewing the data monthly in order to come up with propositions to curb spending and ensure compliance with the target. The committee overviews the implementation of the spending cuts decided along with the level of the target. It is in charge of monitoring the regulation strategy in the case of an overshooting of the target and of preparing the construction of the target the following year.

Role of private insurance and out of pocket co-payments

Cost-sharing applies to most goods and services, especially primary care and specialist consultations, laboratory tests, pharmaceuticals, eyeglasses and contact lenses, dental care and dental prostheses. Pregnant women, those with certain severe medical conditions, those with an income below a defined threshold, those on social assistance, and victims of accidents at work are exempted from cost-sharing. The private voluntary complementary health insurance increases the rate of reimbursement, reducing the discrepancy between the actual amount paid by patients and the amount they are reimbursed by their social health insurance fund. Voluntary insurance decreases this discrepancy to greatest extent for prostheses, drugs, optical and dental care. In doing so, complementary health insurance reduces the

ability of cost-sharing to control overconsumption as it renders users less cost-aware. As a result, the authorities implemented a ticket, and a “deductible”: the patient has to pay €1 for each physician visit⁽¹⁴⁸⁾ and each biomedical analysis, €0.50 per drug box, €0.50 on each paramedical procedure and €2 for each medical transport. In the same time, government encourages with fiscal incentive “responsible contracts” that don’t cover the deductible part in order to limit health sector inflation. As a result the deductible is usually not covered by complementary health insurance.

Private expenditure (patient co-financing and voluntary private health insurance) represented around 23.3% of the total health expenditure in 2015, i.e. a small increase since 2003 (22%), slightly above the EU average (21.6% in 2015). Out-of-pocket spending accounts for a small part of private expenditure (6.8% of total health spending which is a small share in the EU context – EU average of 15.9% in 2015) and having fallen consistently since 2011.

Types of providers, referral systems and patient choice

The French system is strongly characterised by freedom of choice and unrestricted access for patient, and by free practice of professionals on the basis of accreditation. The primary and secondary health care delivery relies then on an easily accessible combination of public and private supply. Providers are organised in two groups: the health institutions that include hospitals, nursing homes and laboratories, which provide most of the inpatient care and employ mainly salaried health professionals⁽¹⁴⁹⁾; and the generally self-employed professionals such as general practitioners (GPs), specialists, dentists, nurses, and pharmacists who provide outpatient care. Primary care is provided by self-employed physicians and other professionals mostly in private individual practices. This is also the case for specialist outpatient services, although sometimes these also work in private clinics. Day case and inpatient care is provided in hospitals. Hospitals are organised in three categories: the

⁽¹⁴⁸⁾ Children under 18, pregnant women between the 6th month and 12 days after delivery, and those with an income below a defined threshold are exempted.

⁽¹⁴⁹⁾ The net salary of a full-time employed doctor in hospital is very close to the one earned by a self-employed GP.

public sector, the non-profit and profit-making private sector, the latter is mainly concentrated on surgical procedures.

In 2015, the number of practising physicians per 100 000 inhabitants was 312 (slightly below the EU average of 344). The number of general practitioners was 154, far above the EU average of 78.3. Finally, the number of practising nurses per 100 000 in 2015 (940) was above the average EU number (825).

It should be noted that there are differences in the supply of physicians across regions as, while total supply is regulated, the location of physicians is not. The *numerus clausus* system was introduced in 1971 in order to regulate access to health professions. Indeed, a ministerial decree sets annually the number of places available for each health qualification and research units. This policy has resulted in the stabilisation of doctors' numbers but some specialities, such as anaesthesiology, gynaecology or obstetrics have been reported to need more professionals. The same problem, which might become more severe in the near future, concerns other specialities and nurses working in hospitals. On the one hand, specific incentives could be developed to promote and encourage staff to work in some specialities currently in shortage. On the other hand, geographical disparities could be reduced. More generally, the human resources strategy needs to tackle staff and population ageing in the future. In this view, some financial incentives have been granted since 2006 to physicians who settle in areas where there is a lack of supply of physicians.

The lack of coordination between primary, specialist and hospital care has been one major problem of the health care system, potentially leading to unnecessary use of specialist and hospital care and the duplication of procedures resulting in higher expenditure. To improve the situation, referring GP and provider networks were implemented as from July 2005. The patient chooses and registers with a general practitioner at the social health fund. The patient is free to change general practitioners but has to report any change. If necessary, the GP plays the role of gatekeeper and sends his patient to a specialist who will report, with the authorisation of the patient, any relevant information to the GP in order to follow-

up and coordinate the care ⁽¹⁵⁰⁾. The patient has to face financial penalties applied to the reimbursement rate by the national sickness fund, if he/she doesn't designate his/her preferred GP and does follow a referral procedure. Around 90% of the insured patients have designated a preferred doctor so far. Patients are also free to choose a specialist and a hospital.

Each patient has his own medical card called "Carte Vitale" which transmits all the transactions to the health fund where he is registered. However, plans to put prescriptions, reimbursements and information on the health status on the card have not been implemented. Therefore, it does not contain any medical information and cannot be used for care coordination. Since 2011, a new individualised medical record (Dossier medical personnalisé, DMP) has also put in place aiming to improve care coordination.

The central government evaluates via the High Authority for Health (HAS) the best medical practices and promotes compulsory life-long medical education. It sets a package of recommendations and targets after consulting with funds and professionals such as for drug prescriptions (generics, right prescription) which each physician is advised to follow. Penalties could be issued if non-compliance to the recommendations is frequent, serious or costly for the health system. Such procedures are likely to have a positive effect on doctors' prescribing behaviour and efforts should continue in that direction.

France has a number of acute care beds per 100,000 inhabitants (407 in 2015) close to the EU average in that year (402). These results reflect efforts made during the 1980's and 1990's to reduce the number of hospitals beds as well as the average hospital length of stay (see further below).

Finally, pharmaceuticals are exclusively distributed by approximately 23,000 pharmacies and their establishment is regulated by a *numerus clausus* taking into account the size of the population and a distance factor.

⁽¹⁵⁰⁾ Gynaecology, ophthalmology, stomatology and psychiatry are out of that procedure.

Treatment options, covered health services

There is a common basket of services of the National Health System that has to be delivered to the whole population covered.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Two payment systems have been implemented, the first one is a reimbursement system (ambulatory care) and the second one is a third-party payer system where the patient pays only the co-insurance or the co-payment (inpatient care and pharmaceuticals).

Outpatient primary and specialist care doctors are generally self-employed and paid on a fee-for-service basis paid by the patient at the consultation and partly reimbursed at a later stage by their social health insurance. The fees are fixed and negotiated between physicians' unions and the public health insurance funds under contracts signed for every four or five years. Medical practitioners and clinics, which are not under contract, have to display their prices. Almost no reimbursement is given by the statutory health insurance to patients visiting professionals not under contract.

Hospital inpatient doctors are mostly salaried employees of the hospitals, with the salary scale defined at central level. For hospital day care or inpatient care, a third-party payer system is generally used whereby the patient pays only the co-insurance or the co-payment.

The amount paid by the patient and not taken in charge by the compulsory insurance is called "ticket modérateur". An average of 70% of the cost of a visit to a GP is thereby refunded, from 80% to 95% for a surgery, 95% for childbirth, 70% for x-rays, dental care and 60% for nursing at home among others. Under certain conditions such as some chronic disease or care requiring hospital stay of at least 30 days ⁽¹⁵¹⁾ or beneficiaries of the CMUC, individuals could be entitled to a 100% reimbursement of medical and hospital costs. Hospitals are remunerated on a payment per case/

⁽¹⁵¹⁾ Although it should be noted that the 100% reimbursement in this case is only applied from the 31st day and patients pay a 20% "ticket modérateur" the first 30 days.

DRG basis ⁽¹⁵²⁾. Hospitals are legally autonomous and manage their own budgets. Since 2009, they have autonomy to recruit their own medical staff.

The number of inpatient discharges is below the EU average (15.4 vs. 16.2 per 100 inhabitants in 2015) but this is related to many policies that have been put in place in order to encourage methods of providing care that are alternative to hospitalisation such as day care surgery or hospitalisation at home. Among others, extension of hospital's capacity via a theoretical exchange rate of one acute bed for two "non-acute" beds is possible. Day cases as % of all hospital discharges are, at 40.7%, well above the EU average (32.3% in 2015). This share has increased gradually since 2009.

Hospital average length of stay (10.1 days in 2014) has fallen since 2007 but is higher than the EU average of 7.7 days in 2014.

The market for pharmaceutical products

The central government regulates the production and distribution of pharmaceuticals and any drug must obtain a formal authorisation to be sold. International price reference is used and based on manufacturing price in DE, ES, IT, and UK. The initial price is also based on the clinical performance and cost of existing treatments.

About 4900 pharmaceuticals are reimbursable in France, which represents approximately one half of the drug presentations available. The list of reimbursable drugs is established by ministerial ordinance and will contain only drugs having a sufficient medical service rendered (SMR) ⁽¹⁵³⁾. The amount reimbursed will depend on various criteria such as the effectiveness, the side effects, the place in the therapeutic process, the seriousness of the condition, the properties of the drug and its importance for public health. According to the SMR, the reimbursement rate for prescribed drugs is chosen between four rates (100%, 65%, 30%, and 15%). In order to control final spending on reimbursable products, the central government sets the prices on producer's side, after bargaining with

⁽¹⁵²⁾ The OECD score for remuneration incentives to raise the volume of care in France is about 4.5 out of 6 as a result of the use of activity related payment elements in physician and hospital remuneration.

⁽¹⁵³⁾ For a period of five years before revaluation.

the drug's committee and the laboratory involved. In order to promote the use of generic drugs, the pharmacists have been financially encouraged to offer their clients generic drugs where this is possible. In such cases, an equivalent profit margin is guaranteed.

Generics also face a fast-track registration and automatic price setting (60% of the price of the brand name drug). Authorities promote rational prescribing of physicians through prescription guidelines, complemented with monitoring of prescribing behaviour and feedback, and education and information campaigns on the prescription and use of medicines. They also promote education and information campaigns for patients. Physicians receive feedback on their prescription behaviour in comparison with that of colleagues and in relation to some sort of national contract/ priorities established between the doctors and the social health insurance funds. Doctors are visited by delegates of the social insurance, who provide them with information on rational prescribing.

Use of Health Technology Assessments and cost-benefit analysis

Quality of care, especially in hospitals, is a major matter of concern to public French authorities. To improve it, from 1996, the central government decided that all health care institutions must be accredited to provide treatment by the Haute Autorité de Santé (HAS). An evaluation procedure is then done on several dimensions such as quality of care, information given to the patient, medical records, general management and risk prevention strategies. The HAS publishes afterward the accreditation reviews. Perhaps performance monitoring in the sector could be further improved by publishing more routine and comparable information on the activity and quality of providers (clinical outcomes, use of appropriate processes, patients' satisfaction and patient experience), which can support choice of provider while help identifying good practices and areas for improvement through peer reviews for example.

Health technology assessment information has been used to define guidelines and determine coverage of new procedures, new medicines and new high-cost equipment, the level of reimbursement of new procedures and new medicines, and to develop guidelines for high-cost

equipment. The benefits package is defined on the basis of clinical effectiveness.

E-Health, Electronic Health Record

The government has the ambition to develop E-Health. The implementation of a medical personal data folder has been ongoing for years but will enter a second phase now.

The government is opening administrative data on reimbursements to researchers. Related to patient privacy, it can sometimes be merged with medical data. That should improve medical products surveillance.

Health promotion and disease prevention policies

The Ministry of Health, on the basis of the overall framework established by the parliament, is responsible for defining priority areas for national programmes in the field of health promotion and disease prevention. The main priorities include cancer, pain control and anti-smoking campaigns. Public health objectives are set in terms of process, outcomes and the reduction of health inequalities. Public expenditure on prevention and public health services as a % of GDP (0.2%) is below the EU average of 0.3% in 2015, and as a percentage of public current health expenditure (1.6%) it is also below the EU average of (3.2%).

As for the lifestyle of the French population, the data suggests that the proportion of regular smokers has decreased slightly (from 26.2% in 2008 to 22.4% in 2014), above the EU average of 20.9%. Over the recent past the proportion of the obese in the population has also increased (from 9.4% in 2001 to 14.7% in 2014), while alcohol consumption shows a reduction from 13.5 litres per capita in 2003 to 11.5 litres in 2014 (still above the EU average of 10.2).

Recently legislated and/or planned policy reforms

Recent policy response

The success in not overshooting the planned expenditure increase in 2013 led the government to propose a reduction of the national health spending target for 2014 by €800 million (the 2014 target

initially set at €179.1 billion was brought down to €178.3 billion) in the rectified social security budget bill. Furthermore, it was decided that €10 billion would be achieved through health insurance savings, and the national health target budget increase would be set at respectively 2.1%, 1.75% and 1.75% for the 2015-2017 time period. These economies relative to the higher planned expenditure were expected to stem from the implementation of the national healthcare strategy, which promotes greater efficiency in expenditure through structural reforms such as the streamlining of treatments, development of outpatient care, improving the share of generic drugs consumed and reducing their prices (along with other drug policies).

The new government has a pluriennial management of the national health spending and has thereby set a maximum target of annual 2.3% of growth of this spending during the five year presidential term 2017-2022. This has since then been further increased up to 2.5 % in the draft budgetary plan for 2019.

The new government has also recently implemented a set of reforms. First of all, prevention (see challenges section below) is at the core of the ministry of health's strategy for the next five years: on January 2018, 11 instead of 3 vaccines were made compulsory, price of tobacco will increase significantly over the government term, and other behavioral taxes are being set (taxes on added sugar in beverages, etc.). Among others, one can also enumerate the main reforms on daily-basis prevention announced on March 2018: possibility to give a vaccine shot against the flu for the dispensary pharmacist, free uterus cancer screening organised nationwide, increased size for the preventive logo on alcohol bottles "forbidden to pregnant women", free "condom card" for people under 25 years old, campaign to identify teenagers' hearing disorders, prevention of obesity from the earliest age, etc.

In order to reinforce access to health services, the plan « renforcer l'accès aux soins » was set into motion in October 2017: rebalancing the medical demography (the number of pluridisciplinary medical centers ("maisons de santé pluridisciplinaires") will double in the next five years, in order to make some zones more attractive to professionals, it will be easier for physicians in

medically under-staffed to cumulate a job and retirement, etc. A ministerial committee made up of professionals and patients will gather every six month to monitor its implementation.

Another structural reform has recently been announced in September 2018. The "Ma santé 2022" four-year-plan consists in a deep transformation of the French Health System in order to have a patient-focused and quality-driven system, to improve primary care access by reorganising the relations between hospital, ambulatory and medico-social services, and to rethink the careers and tuition of health professionals. Some of the main measures are: deployment of 1000 "Communautés professionnelles territoriales de santé (CPTS)" which allows liberal professionals to practice in a coordinated way; financing of medical assistants that will allow to free up medical time for physicians ; creation of 600 primary care hospitals ("Hopitaux de proximité"); reforming care grading in the hospital system; removal of the 2 competitive examinations during the medical doctor studies (to be replaced with a more progressive process that will more take into account medical capacities of the students).

Some other important reforms are:

- a "sanitary service" for medical students, in order to increase prevention and access to healthcare.
- The agreement "100% santé" signed in June 2018 with health professionals will provide "zero out-of-pocket spending" on glasses, hearing aids and dentures to patients. In those three areas, the patients will be provided devices that are quality compliant and without out-of-pocket spending after coverage by the compulsory and complementary health insurance. This deal will be put into application gradually until its full implementation in January 2021.

Recent policy changes adopted

From January 2016 collective complementary insurance is compulsory for all employees of the private sector.

New regulations and fiscal incentives for "responsible contracts" have been implemented in order to limit health price inflation due to complementary insurance coverage.

The "Loi de modernisation de notre système de santé" has been promulgated in January 2016. It rationalises the offer by care providers: for hospitals with the GHT ("groupements hospitaliers de territoire") and for ambulatory care and coordination between inpatient and outpatient care ("Communautés professionnelles territoriales de santé"). Health care accessibility has also been improved by the direct payment to doctors ("tiers payant") of the reimbursement of social security funds.

Challenges

The analysis above has shown that a range of reforms has been implemented in recent years to a very large extent successfully, which France should continue to pursue. For example, improvements in access to health insurance for those most vulnerable, improvements in hospital efficiency, improved data collection and monitoring and better control of pharmaceutical expenditure, greater use of primary care and improvements in care coordination from primary to secondary care. The main challenges for the French health care system are as follows:

- To reinforce human resources strategies to avoid a shortage of physicians in the future as a result of staff and population ageing. This can be done by pushing up numerus clausus ceilings according to projected needs. To improve geographical access to doctors especially between urban and rural areas through incentives system directed at doctors, especially primary care staff.
- To continue efforts to implement cost-containment policies in a system characterised by fee-for-service payment of doctors and unrestricted freedom of choice for patients. These include continuing to encourage a more rational and coordinated use of care through greater use of primary care and more effective referrals from family doctors to steer demand to other types of care and organise appropriate and cost-effective channels of treatment. Even

if patients' financial contributions have already been implemented, it may also be worth exploring if cost-sharing can be further adjusted to encourage the use of more cost-effective interventions.

- To continue to promote generic pharmaceuticals by extending reference pricing schemes.
- To continue to improve the general governance of the system, through strategies to rationalise administrative procedures, therefore enhancing the global system's efficiency and quality. Possible areas include: increasing the financial responsibility of the funds, clarifying responsibilities of the various actors in the system, and improving accountability, perhaps through greater use of systems of rewards and fines.
- To improve data collection and comparability in order to evaluate more thoroughly the activity and quality of providers and the overall system. Possible indicators include preventable hospitalisations, readmission rates, mortality post-hospital, complication during and post operation, prescription mistakes (recommended by OECD). Public comparisons and peer reviews can help providers identify areas for improvement and good practices.
- To enhance health promotion and disease prevention activities, i.e. promoting healthy life styles.

Table 2.10.1: Statistical Annex – France

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	1,772	1,853	1,946	1,996	1,939	1,998	2,059	2,087	2,115	2,148	2,194	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	28.2	28.6	29.2	28.1	26.7	27.5	28.0	27.9	28.2	28.6	29.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	0.8	1.7	1.7	-0.4	-3.4	1.5	1.6	-0.3	0.1	0.4	0.6	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	2.2	0.8	1.3	3.0	0.7	2.1	0.4	0.6	1.9	0.2	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	10.6	10.7	10.6	10.7	11.4	11.4	11.4	11.5	11.5	11.7	11.7	10.2	10.1	10.1	10.2
Total current as % of GDP	10.0	10.1	10.0	10.1	10.8	10.7	10.7	10.8	10.9	11.1	11.0	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.9	0.6	0.2	0.3
Total per capita PPS	2,679	2,797	2,891	2,999	3,089	3,144	3,238	3,288	3,332	3,417	3,451	2,745	2,895	2,975	3,305
Public total as % of GDP	8.6	8.3	8.1	8.2	8.8	8.7	8.7	8.8	8.9	9.0	9.0	8.0	7.8	7.8	8.0
Public current as % of GDP	8.3	7.9	7.8	7.9	8.5	8.4	8.4	8.5	8.6	8.7	8.7	7.7	7.6	7.6	7.8
Public total per capita PPS	2,179	2,171	2,230	2,288	2,370	2,404	2,472	2,526	2,561	2,630	2,647	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.36	0.36	0.31	0.30	0.30	0.30	0.33	0.35	0.29	0.31	0.27	0.2	0.2	0.2	0.2
Public as % total expenditure on health	81.3	77.6	77.1	76.3	76.7	76.5	76.3	76.8	76.9	77.0	76.7	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.7	14.6	14.3	14.3	14.2	14.3	14.3	14.2	14.4	14.1	14.1	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	99.9	99.9	99.9	99.9	100.9	101.9	99.9	99.9	99.9	99.9	99.9	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	7.4	7.4	7.4	7.8	7.6	7.5	7.5	7.4	7.1	6.9	6.8	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	62.8	63.2	63.6	64.0	64.4	64.7	65.0	65.3	65.6	65.9	66.5	502.1	503.0	505.2	508.5
Life expectancy at birth for females	83.8	84.5	84.8	84.8	85.0	85.3	85.7	85.4	85.6	86.0	85.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	77.3	77.6	77.8	78.0	78.2	78.7	78.7	79.0	79.5	79.2	76.6	77.3	77.7	77.9
Healthy life years at birth females	64.6	64.4	64.4	64.5	63.5	63.4	63.6	63.8	64.4	64.2	64.6	62.0	62.1	61.5	63.3
Healthy life years at birth males	62.3	62.8	62.8	62.8	62.8	61.8	62.7	62.6	63.0	63.4	62.6	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	46	43	40	40	39	37	84	82	80	78	78	64	138	131	127
Infant mortality rate per 1 000 live births	3.8	3.8	3.8	3.8	3.9	3.6	3.5	3.5	3.6	3.5	3.7	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	3.4	3.1	3.0	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.8	1.8	1.8	1.9	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.8	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.6	1.7	1.6	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	3.1	2.9	2.9	2.8	3.0	3.0	2.9	3.0	3.0	3.0	3.0	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.1	1.2	1.1	1.2	1.3	1.2	1.3	1.3	1.3	1.4	1.4	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.10.2: Statistical Annex - continued - France

Composition of total as % of total current health expenditure												EU - latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	33.6%	30.8%	30.5%	29.8%	29.7%	29.7%	29.4%	29.4%	29.5%	29.3%	29.5%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	6.2%	4.0%	3.8%	3.7%	3.7%	3.7%	3.8%	3.9%	3.9%	4.1%	4.1%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	17.9%	18.0%	18.0%	18.4%	18.0%	18.0%	18.3%	18.4%	18.6%	18.7%	18.7%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	18.4%	17.3%	17.2%	17.0%	16.7%	16.3%	16.0%	15.6%	15.0%	15.0%	14.7%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	4.5%	4.5%	4.6%	4.8%	4.7%	4.9%	5.0%	5.2%	5.2%	5.3%	5.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.3%	2.2%	2.2%	2.3%	2.5%	2.1%	2.1%	2.0%	2.0%	2.0%	1.9%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	6.9%	6.1%	6.0%	6.0%	6.0%	6.0%	6.1%	6.0%	6.1%	6.1%	6.0%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	37.8%	36.8%	36.4%	35.7%	35.5%	35.4%	35.1%	35.1%	35.0%	34.7%	34.8%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	7.0%	4.7%	4.6%	4.4%	4.4%	4.4%	4.5%	4.6%	4.5%	4.7%	4.7%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	13.6%	14.5%	14.5%	15.1%	14.7%	14.7%	14.9%	15.0%	15.3%	15.5%	15.6%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	15.6%	15.4%	15.4%	14.8%	14.4%	14.3%	14.2%	13.7%	13.3%	13.5%	13.2%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.8%	2.0%	2.2%	2.2%	2.1%	2.3%	2.4%	2.4%	2.4%	2.5%	2.6%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	1.9%	1.9%	2.0%	2.0%	2.2%	1.9%	1.8%	1.8%	1.7%	1.6%	1.6%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	5.1%	4.4%	4.5%	4.6%	4.5%	4.4%	4.3%	4.3%	4.2%	4.0%	3.9%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.48	0.52	0.55	0.61	0.64	0.70	0.75	0.87	0.94	1.09	1.25	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.5	1.7	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2
Proportion of the population that is obese	..	10.5	..	12.2	..	12.9	..	14.5	:	14.7	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	25.9	:	26.2	:	23.3	:	24.1	:	22.4	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	12.2	12.4	12.2	11.9	11.8	11.7	11.8	11.5	11.1	11.5	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	:	:	:	:	:	:	307	308	310	311	312	324	330	338	344
Practising nurses per 100 000 inhabitants	785	804	791	819	847	876	901	910	940	:	:	837	835	825	833
General practitioners per 100 000 inhabitants	165	164	163	162	160	159	156	156	155	155	154	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	7.0	6.8	6.8	6.7	6.7	6.7	6.8	6.7	6.4	6.3	:	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	16	16	16	16	16	16	16	16	16	15	15	17	16	16	16
Day cases discharges per 100 000 inhabitants	9,629	10,205	9,378	9,287	9,158	9,297	9,541	9,731	9,982	10,265	10,563	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	74.0	74.0	73.9	74.2	74.4	75.0	75.0	75.0	75.8	75.1	:	77.1	76.4	76.5	76.8
Hospital average length of stay	5.9	5.9	11.2	10.9	10.5	10.2	10.1	10.1	10.1	10.1	:	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	37.0	38.6	36.8	36.8	36.3	36.9	37.6	38.2	39.0	39.8	40.7	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070			
AWG reference scenario	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.4	8.4	8.4	8.3	8.3	0.5	0.9	
AWG risk scenario	7.9	8.1	8.3	8.5	8.6	8.8	8.9	9.0	9.1	9.1	9.1	9.1	1.2	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070			
Population projections until 2070 (millions)	66.7	67.8	69.2	70.5	71.8	72.9	73.7	74.4	74.9	75.5	76.2	76.9	15.4	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.11. GERMANY

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

GDP per capita in PPS is at 33,200 and above the EU average of 29,600 PPS in 2015. Germany has a population of 81.2 million inhabitants. During the coming decennia the population will steadily decrease, from 82.1 million inhabitants in 2016 to 79.3 million inhabitants in 2070, depending on the migration rate. Thus, Germany is facing a decrease of its population by 3%, while the EU average population is estimated to increase by 2%.

Total and public expenditure on health as % of GDP

Total expenditure on health was one of the highest in the EU at 11.2% of GDP in 2015 (EU: 10.2%). Total public spending on health was at 9.4% of GDP (EU: 8.0%). Looking at health care without long-term care⁽¹⁵⁴⁾ reveals a similar picture with public spending above the EU average (DE: 8.1% vs. EU: 6.8% in 2015). Spending relative to GDP was quite constant between 2003 and 2008, with a sharp increase due to falling GDP in 2009, and has stayed on this level in 2015. In 2015, 16.0% of total government expenditure was channelled towards health spending (EU: 15.0%). In per capita terms, total (3,981 PPS) and public spending (3,365 PPS) are well above the respective EU averages (3,305 PPS and 2,609 PPS)⁽¹⁵⁵⁾.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure for the insured in the Statutory Health Insurance is projected to increase by 0.7 pps of GDP⁽¹⁵⁶⁾, below the average growth level expected for the EU (0.9 pps of GDP), according

⁽¹⁵⁴⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽¹⁵⁵⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to Eurostat data series, which reflect only current expenditure.

⁽¹⁵⁶⁾ Due to some institutional specificities, the projections for Germany include solely expenditure of the Statutory Health Insurance Funds and the State, and exclude expenditure of the mandatory Private Health Insurance Funds. Thus, the projections for Germany cover approx. 87% of the population insured at the Statutory Health Insurance.

to the "AWG reference scenario"⁽¹⁵⁷⁾. When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure for the insured in the Statutory Health Insurance is expected to increase by 1.5 pps of GDP from now until 2070 (EU: 1.6). Overall, projected health care expenditure increase is expected to add to budgetary pressure. However, no fiscal sustainability risks appear over the long run as the favourable initial budgetary position would mitigate the projected increase in age-related expenditure⁽¹⁵⁸⁾.

Health status

Life expectancy at birth is 78.3 years for men and 83.1 years for women, being one of the highest in the EU (EU: 77.9 for men and 83.3 for women). Healthy life years are also above the EU average (65.3 vs. 62.6 years and 67.5 vs. 63.3 years). Amenable mortality rates, i.e. deaths that should not occur with timely and effective care, are well below EU average. Infant mortality is at the level of 3.3‰ (EU: 3.6‰).

System characteristics

System financing, revenue collection mechanism, coverage and role of private insurance and out of pocket co-payments

The German health care system provides universal coverage. Insurance is compulsory and provided by either statutory (SHI) (around 90% of the population) or private health insurance (PHI). The membership in the SHI is mandatory for employees with gross income not exceeding a legally defined threshold, covering in most cases also the spouses and children of the insured without additional contributions. High-earners with a monthly income exceeding a specified threshold, the self-employed and civil servants have to contribute towards a private insurance.

SHI provides a standardised benefits package. Premiums are income dependent but do not

⁽¹⁵⁷⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽¹⁵⁸⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

dependent on individual health risks. In contrast, PHI premiums depend on the individuals' health risks and not on income. The benefit package is based on an insurance contract and co-insurance of family members requires additional premiums. Once covered by PHI, the possibility to switch back to SHI is restricted.

SHI is predominately financed through labour-income-dependent contributions accompanied by a complementary government subsidy. Since 2009, a National Health Fund (*Gesundheitsfonds*) is responsible for pooling contributions paid at a uniform rate set by the Federal government. From January 2015 on, the uniform contribution rate is set at 14.6% (7.3% and 7.3% paid by employers (pensioners) and employees (pension fund), respectively. Yet, the SHIs may charge additional surcharges if expenses do not cover expenditures. The introduction of additional surcharges increases competition between SHIs (see explanation of the SHI health financing reform below).

The collected contributions are pooled and complemented by a federal tax subsidy. They are allocated then to the individual sickness funds in the form of: (i) a uniform basic lump-sum per person insured, (ii) payments adjusted for risk, gender, invalidity, age and morbidity from 80 chronic and serious illnesses; and (iii) additional funds to cover other standard expenditure (e.g. administrative costs).

In 2018, the SHI was composed of 110 sickness funds, which are non-profit public law corporations and financially and organisationally independent bodies. The number of SHI funds has decreased from over 1,123 in 1992, mainly as a result of reforms aimed at strengthening the competition among health-care insurers. There is an obligation for sickness funds to insure anybody who is entitled to SHI. A risk adjustment mechanism redistributes funds across SHI funds to better reflect actual morbidity costs.

In 2015, the SHI bore 58% of total health expenditure. Other social insurance schemes bore another 10.6%, the PHI 8.39%, public authorities 4.6% and employers 4.2%. Private out-of-pocket payments amount to 12.5% of total health expenditures (EU: 15.9%). Private expenditure with 16.5% was below the EU average of 21.6%. Since 2004, patients need to provide certain co-

payments limited to 2% of an annual household income, respectively to 1% for the chronically ill. The quarterly fee paid by patients for medical treatment (*Praxisgebühr*) was abolished at the beginning of 2013, after having been assessed as ineffective.

The health reform (*GKV-Finanzstruktur- und Qualitätsweiterentwicklungsgesetz*), that came into force in January 2015, promotes a quality-based competition among health funds. Its main elements are the following. The general contribution rate was decreased from 15.5% in 2010 to 14.6%, while freezing the contribution rate paid by employers at 7.3%. The 0.9% employee's contribution surcharge was abolished. Health funds received greater financial autonomy due to the lowering of the uniform contribution rate and the introduction of health insurance fund-specific, income-related surcharges to cover expenditures exceeding risk-adjusted allocations. A full revenue compensation scheme for the income-related surcharges was introduced to avoid incentivising risk selection.

Administrative organisation

The responsibility for the system is shared between national and regional level (*Länder*). At the national level the legal framework for both tiers of the insurance system is set. The *Länder* are responsible for organising medical education, planning inpatient capacities and financing capital investments in hospitals. Large sections of the German health care system are shaped through contracts between the SHI-funds and various health care providers.

A special feature in the regulation of medical services of the German health care system is the important role, alongside that of the legislature, played by the self-governing bodies of service providers and health insurance funds. In the statutory health insurance system the major decision-making body is the Federal Joint Committee (*G-BA*). It is formed by the national associations of doctors and dentists, the German Hospital Federation and the National Association of Health Insurance Funds. Thus, the G-BA determines the benefit catalogue of the SHI as well as on binding collective regulations on the quality of health care services.

Treatment options, covered health services

SHI covers preventive services, inpatient and outpatient hospital care, physician services, mental health care, dental care, optometry, physical therapy, prescription drugs, medical aids, rehabilitation, hospice and palliative care, pregnancy care, maternal leave and sick leave compensation. SHI preventive services include regular dental check-ups, child check-ups, basic immunisations, check-ups for chronic diseases, and cancer screening at certain ages. All prescription drugs - including newly licensed ones - are covered unless explicitly excluded by law (mainly so-called lifestyle drugs) or pending evaluation. While the broad contents of the benefits package are legally defined, specifics are decided upon by the Federal Joint Committee.

Types of providers, referral systems and patient choice

Primary care is provided by private for-profit physicians, most of whom run individual practices, and about 25% share a practice. The majority of doctors are accredited for SHI. They can also take private patients and charge them higher prices. Traditionally, the German health-care system does not have a gate-keeping system and the patients are free to choose any doctor under a contract with their sickness fund. SHI operates with collective contracts covering provision by all doctors of a certain region. There is no affiliation to a single sickness fund. Additionally, there is also the option for selective contracts for a range of services or specific care models. More recently, patients are encouraged to choose a family doctor.

The number of physicians has grown constantly over the recent decade: from 340 per 100,000 inhabitants in 2005 to 414 in 2015, well above the EU average of 344. Over the same period of time, the number of general practitioners has stayed nearly constant at 66 per 100,000 between 2005 and 2015 (EU: 78). The number of nurses is at 1,334 per 100,000 in 2015, remaining well above the EU average of 833. Total and public expenditure on outpatient care as a % of current health expenditure were at the EU average (around 22%).

Germany has the highest per-capita hospital beds for curative (acute) care in the EU: 611 beds per

100,000 inhabitants in Germany in 2015 compared to 402 in the EU. Obviously, access to inpatient care is high. This is despite a constant decline of hospital bed capacity in the past, driven by a decrease in the average length of stay, which still remains above the EU average.

Contrary to the general trend in the EU, the number of hospital inpatient discharges is rising from 21.3 in 2005 to 24.9 in 2015 per 100 inhabitants (EU: 16.2 in 2015). At the same time, the level of day case discharges is very low with 677 discharges per 100,000 inhabitants in Germany, versus 7,635 discharges in the EU. The low number of day case discharges is a consequence of the disintegrated system of care, which basically limits the room for providing day case treatments in German hospitals. Public inpatient care accounts for roughly 31% of public expenditure on health in Germany compared to 32% in the EU. High expenditure levels may be a sign of a modern hospital system providing high-quality services. They may, also, reflect hospital centrism, an overprovision of inpatient services, a focus on costly high-technology treatments and an undervaluation of (cheaper) ambulatory care services (at the same level of quality of care).

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Physicians and other health professionals working in hospitals or institutions for nursing care or rehabilitation are paid salaries. Public and non-profit providers usually pay public service tariffs to their employees, while private, for-profit providers may pay lower or higher wages or additional payments to their employees. Services provided by the ambulatory care providers, as well as by private physicians, dentists, pharmacists, midwives and other health professionals are subject to predetermined price schemes or price ranges.

Medical billing is based on the standard schedule of fees (*Einheitlicher Bewertungsmaßstab - EBM*). It is the fee schedule that applies to outpatient care and, in the form of fees-for-service or flat rates, comprises all services that outpatient doctors can bill for reimbursement by the statutory health insurance funds. Patients covered by PHI pay out-of-pocket on a fee-for-service basis. Doctors may charge higher fees for private patients – based on a medical fee schedule for private patients.

Hospital expenditures are financed using two different mechanisms. Investment is financed by the regions (*Länder*), mainly through regional taxes, while recurrent expenditure (thus, mainly cost of care) is reimbursed by the SHI-funds and PHI. Recurrent expenditures of acute hospitals are reimbursed by the SHI-funds according to the Diagnosis-Related Group (DRG) system, with some exceptions.

The market for pharmaceutical products

Until 2011, prices of medicines were mainly determined by internal reference pricing for generics and therapeutic substitutes. Internal reference prices are price limits on certain pharmaceutical substance groups. The G-BA specifies the groups of active ingredients. The National Association of Health Insurance Funds sets the reference prices, considering that enough medicines are available at that price. Patients have to bear the price difference for any drug whose price exceeds the reference level. This sets strong incentives to producers not to set prices above the reference price. In contrast, prices of newly invented drugs were unilaterally set by the producer.

Since 2011, the Reform of the Market for Pharmaceutical Products (*AMNOG*) obliges producers to verify the additional therapeutic benefit of new patented medicines. If an additional benefit is proven, the National Association of Statutory Health Insurance Funds negotiates the price for the medicine with the pharmaceutical company. If an additional benefit is not proven, new active pharmaceutical ingredients are subject to reference pricing. If this is not possible the price must not be higher than the price of the therapy standard.

AMNOG aims at ensuring fair prices that balance the interests of both, the statutory health insurance as well as the pharmaceutical companies. As a further cost-containment measure, the SHI-Amendment Law (in force since August 2010) introduced a mandatory discount of 16% on pharmaceuticals and freeze of prices of pharmaceuticals until 2013. With the 13th and 14th SGB V-Amendment Law (in force since December 2013 respectively April 2014) the price freeze was extended until 2017 and while the mandatory discount of 16 % ran out by the end of 2013, there

is still a remaining mandatory discount of 7 % (16 % for generics). With the Pharmaceutical Care Strengthening Act (*AMVSG*) the price freeze was extended until 2022, though from 2018 onwards price increases in line with inflation will be allowed. However, the price freeze does not apply for medicines that have been subject to internal price referencing and it is not relevant for medicines that have a negotiated price after the AMNOG-procedure.

Pricing policies are supplemented by financial incentives and the monitoring of prescription patterns of physicians vis-à-vis prescription guidelines and prescription targets.

Use of Health Technology Assessments and cost-benefit analysis

Health Technology Assessment (HTA) is increasingly used in Germany to inform health-care decision-making. Quality and efficiency are two deciding factors in maintaining the performance of the German health care system. To achieve this aim, it is important to examine objectively the advantages and disadvantages of medical services for patients. This is the responsibility of two German Institutes: the German Agency for Health Technology Assessment (*DAHTA*), which runs the HTA information system and the Institute for Quality and Efficiency in Health Care (*IQWiG*). IQWiG is an independent scientific institute that investigates the benefits and harms of medical interventions for patients.

eHealth (e-prescription, e-medical records)

One of the most important eHealth projects in the German health care system is the adoption of an eHealth card and a telematics infrastructure. The eHealth card is meant to contribute to better medical care provision, to improve communication among all of the parties involved and ensure greater efficiency in health care processes. To this end, the application possibilities for the eHealth card are to be expanded step by step, whereas the eHealth card has been distributed to the ca. 70 million publicly insured persons in Germany.

A new act on eHealth, which came into force in December 2015, accelerated the deployment of the applications of the eHealth card, setting clear

deadlines and further specifications to the entrusted company (*Gematik*). In addition, the act on eHealth set out further incentives with regard to telemedicine as well as supporting interoperability. *Gematik* is responsible for the national telematics infrastructure and the applications of the eHealth card and supported by the self-administration. The act on eHealth also supported *Gematik*'s continued work to support interoperability at EU-level.

As set out in the act on eHealth, from the end of 2018 onwards patients in Germany can choose to have the relevant emergency data stored on their health card. Also an electronic medication plan is planned to be available by end of 2018, including a verification of drug treatment safety among care providers. The implementation of Electronic Patient Health Records will follow and should be completed by 2021. They will be managed by health professionals, but also patients will be able to store data and access the information stored by health professionals. The design of the German telematics infrastructure fulfils the highest safety standards: there are clear rights of access and the accessing of data by physicians is recorded. Medical data is encrypted. At all times, patients have control over their data and decide whether and which medical data may be stored and who is entitled to read them.

Health and health-system information and reporting mechanisms

The planning of measures on health care provision is based on a range of information and research made available by various actors at the federal, state and corporatist levels. For example, the Federal Association of Sickness Funds and the Federal Association of SHI Physicians are obliged by law to provide and publish statistics on their financial performance and activities and about the structure of their membership. Additionally, these and other stakeholders are financing health services research, health policy research and publish related reports and statistics. A large number of health statistics is published by the Federal Statistical Office. An Advisory Council on the Assessment of Developments in the Healthcare System reports every two years to the Federal Ministry of Health on current developments in the health care system.

Health promotion and disease prevention policies

Total and public expenditure on prevention and public health services as a % of total current health expenditure were at EU average in 2015. The German Preventive Health Care Act (*Präventionsgesetz*) has given a further boost on health prevention. SHI-funds are obliged to provide more disease prevention and health promotion activities especially in the settings and spend more money in this sector (See section on recently legislated reforms).

Transparency and corruption

The task of supervising whether doctors, dentists, pharmacists and psychotherapists fulfil their professional obligations is incumbent on the specific professional organisations and the professional disciplinary tribunals. Professional obligations include the observance of specific prohibitions regarding inadmissible business relations and forms of cooperation, or relations that are prone to corruption, with other benefit and care providers. Statutory disclosure obligations apply, for example, to fees and remuneration received within the framework of surveys and observational non-interventional trials in the context of medicinal products supply.

The health insurance funds, together with the outpatient doctors' associations and/or the associations of the other care providers, are responsible for verifying the observance of the rules applicable in the statutory health care system regarding the cost-effectiveness of care provision and the mathematically and factually accurate settlement of claims for benefits and services by the care providers. Furthermore, offices responsible for combating misconduct in the statutory health insurance have been set up at all health insurance funds and outpatient doctors' associations as well as their associations at Land and federal level.

In 2016, the *Act to Combat Corruption in Healthcare* entered into force, whereby active and passive bribery in the health care sector were added as criminal offences to the Criminal Code (sections 299a, 299b). This goes back to a decision by the Federal Supreme Court from 2012 that had identified criminal liability loopholes in regards to

the application of the bribery provisions in the Criminal Code to healthcare professionals, specifically doctors working in the field of statutory health insurance.

Recently legislated and/or planned policy reforms

The increase in the elderly population will result in a greater need for health and long-term care benefits. The federal government addresses these challenges in its recent reforms to the health care system and has implemented several structural health care reforms to strengthen competition in the health care system in order to improve efficiency in health care provision. A sustainable funding for health care provision was emphasised in particular as part of this process.

The Reform of the Market for Pharmaceutical Products (AMNOG) in 2011 was a far-reaching structural reform that aimed at curbing expenditure growth of medicines. The AMNOG obliges producers to verify the additional therapeutic benefit of new patented medicines. The AMNOG also allows for the possibility of price negotiations for patented medicines instead of unilateral price setting by the producers.

The Health Financing Reform (*Act on the further development of the Statutory Health Insurance System's Financial Structure and Quality*), which came into force in January 2015, promotes quality-based competition among providers and health funds. Health funds received greater financial autonomy due to the lowering of the uniform contribution rate and the introduction of health insurance fund-specific, income-related surcharges to cover expenditures exceeding risk-adjusted allocations. The idea behind the surcharges is to foster competition among statutory health funds. Through increasing the financial autonomy of health funds and by implementing a consistent quality focus in health care provision, the cost-effectiveness of public spending should be improved. At the same time, freezing the share of employers' health insurance contributions at 7.3% aimed at containing wage related costs. The latter measure, however, will be reversed as of January 2019 (*GKV-GEK*).

The establishment of an Institute for Quality Assurance and Transparency in the healthcare

sector (*IQTIG*), as specified in the *Act to Further Develop the Financial Structure and Quality of the Statutory Health Insurance System*, strengthens competition in terms of quality in the statutory health insurance system. The aim is for patients to have a set of transparent criteria which they can use to ascertain which specific hospitals offer the best quality for a specific treatment, for instance. Higher quality in hospital care, should translated in fewer complications and re-admissions and will lead, in the medium to long term, to a more efficient use of resources and to greater sustainability in the German health care system.

Representatives of the federal government and the *Länder* agreed for structural reform measures in the hospital sector that came into force in January 2016 (*KHSG – Krankenhausstrukturgesetz*). The aim was to boost the efficiency of hospital care – ranging from nationwide care provision to high-end medical care – by improving the efficient use of resources. Important goals included strengthening the quality of care as a criterion, when it comes to hospital planning and the remuneration of services, and establishing a promotion programme for nursing homes. A structural fund was set up to finance measures to improve existing care structures. To this end, a one-time disbursement of 500 million euros was made from the liquidity reserve of the national health fund. This money was supposed to be used to finance projects proposed by the *Länder*, if the latter contribute to an equal amount. Thus, a maximum of 1 billion euros funding was made available in order to promote the reduction of excess capacity and the transformation and concentration of hospital capacities. Presumably, all of the available funds will be used until the end of 2018.

In addition to that a legislation is planned which focusses on the further improvement of hospital care. This legislation is supposed to enter into force in the year 2019 and contains for example measures to improve the reconciliation of work and family and financing measures in order to improve the current staff situation in hospital care. Furthermore, the above mentioned structural fund will be continued for four more years with a disbursement of one billion euros per year. Such amount is to be contributed by the liquidity reserve of the national health fund and the *Länder* in equal shares. Finally, the German federal government

recently submitted draft legislation providing for minimum nurse to patient ratios in selected fields of hospital services in order to improve patient security, quality of services and working conditions in the hospitals.

The federal government introduced a "*Preventive Health Care Act*" that entered into force in July 2015. At the core of this law is the strengthening of prevention and health promotion in the settings, such as child day-care centres, schools, workplaces, neighbourhoods or in long-term care facilities. The intention is to achieve this through a much better fine-tuning of efforts undertaken by persons responsible for these settings at federal, regional (*Land*) and municipal level. Expenditure by the health insurance funds on prevention and health promotion is to be almost doubled. The additional expenditure shall be offset in the medium and long term by cost savings achieved through avoided costs of diseases. Additionally, early detection screening among children, young persons and adults will continue to be developed and important measures shall be taken to close vaccination gaps.

In order to ensure a needs-based, universal and easily accessible supply of medical care, the federal government introduced the *Act to Strengthen Care Provision in the Statutory Health Insurance System* (Care Provision Strengthening Act) that came into force in July 2015. The primary objective of this law is to ensure a proper supply of physicians both in the cities and in the rural areas. The role of family doctors is to be strengthened. The strain on doctors is to be reduced by allowing them to delegate selected medical services to qualified non-physician personnel, for example, practice assistants. Moreover, in the future, hospitals in underserved areas will be able to assume more responsibility for medical care. In order to promote innovative care structures, to facilitate inter-sectoral cooperation among health care providers and to stimulate research on health care provision, an innovation fund has been set up at the *Federal Joint Committee*, endowed with EUR 300 million annually – initially from 2016 to 2019.

The coalition agreement from February 2018 calls for further amendments to improve the access to healthcare with action focusing on minimising

waiting times for outpatient care appointments and on improving outpatient medical care.

Telemedicine and digital technologies can provide vital support in organising the supply of healthcare. In order to make these advantages available nationwide as soon as possible a new act on eHealth was introduced by the federal government and came into force in December 2015. The act on eHealth contains an overall plan to accelerate the deployment of the telematics infrastructure and the applications to the eHealth Card such as electronic emergency data, medication plan and electronic health records as well as to set out further incentives with regard to telemedicine. Digital technologies are meant to contribute to better medical care provision, improve communication among all parties involved and ensure greater efficiency in health care processes (See above the section on eHealth: e-prescription, e-medical records).

Further legal adaptations to the eHealth framework are foreseen in 2018, so that patients will be able to access eHealth applications via their mobile phones and health insurances will be obliged to introduce Electronic Health Records by 2021 at the latest.

Challenges

The analysis above shows that a wide range of promising reforms has been implemented in recent years to strengthen financial sustainability, efficiency and quality of health care provision. The main challenges for the German health system are as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated care against the background of rising health care expenditure over the coming decades, due to population ageing and non-demographic factors.
- To improve further the coordination among care providers and to reduce inter-sectorial borders between inpatient and outpatient care and to promote new models of health care delivery.

- To promote further telemedicine and digital technologies in the health care sector for a better medical care provision, for improving communication among all of the parties involved and to ensure greater efficiency in health care processes.
- To enhance primary care provision through promoting the number and the use of GPs' services.
- To extend the possibilities of hospitals to provide ambulatory and day care as well as to transfer more health care services into the ambulatory sector in order to reduce the number of inpatient care treatments.
- To promote further the process of modernisation and specialisation among hospitals and to stimulate the further reduction of excess capacities.
- To strengthen further the role of health promotion and disease prevention in the overall health care system as well as in society in general.

Table 2.11.1: Statistical Annex – Germany

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	2,301	2,393	2,513	2,562	2,460	2,580	2,703	2,758	2,826	2,932	3,044	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	29.1	30.2	31.5	31.3	28.9	30.5	31.9	32.1	31.7	32.6	33.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	0.9	3.9	3.5	1.4	-5.3	4.3	3.7	0.3	0.2	1.5	0.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	2.3	1.9	3.5	4.0	2.6	0.9	0.5	-0.8	2.8	-0.2	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	10.8	10.6	10.5	10.7	11.8	11.6	11.3	11.3	11.2	11.3	11.2	10.2	10.1	10.1	10.2
Total current as % of GDP	10.3	10.1	10.0	10.2	11.2	11.0	10.8	10.8	11.0	11.1	11.2	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.2	0.3	0.0	0.9	0.6	0.2	0.3
Total per capita PPS	2,866	2,936	3,041	3,169	3,351	3,466	3,603	3,678	3,723	3,900	3,981	2,745	2,895	2,975	3,305
Public total as % of GDP	7.9	7.7	7.6	7.8	9.4	9.2	9.0	9.0	9.2	9.3	9.4	8.0	7.8	7.8	8.0
Public current as % of GDP	7.8	7.7	7.6	7.8	9.3	9.2	9.0	9.0	9.2	9.3	9.4	7.7	7.6	7.6	7.8
Public total per capita PPS	2,084	2,131	2,212	2,304	2,668	2,768	2,875	2,940	3,075	3,223	3,365	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.02	0.01	0.02	0.02	0.01	0.02	0.03	0.03	0.03	0.03	0.02	0.2	0.2	0.2	0.2
Public as % total expenditure on health	72.7	72.6	72.7	72.7	79.6	79.9	79.8	79.9	82.6	82.6	84.5	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.3	14.7	15.2	15.5	15.2	14.9	15.4	16.1	16.4	15.9	16.0	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	14.2	14.3	14.2	14.0	13.8	13.9	13.9	13.9	13.2	12.7	12.5	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population and health status															
Population, current (millions)	82.5	82.4	82.3	82.2	82.0	81.8	80.2	80.3	80.5	80.8	81.2	502.1	503.0	505.2	508.5
Life expectancy at birth for females	82.0	82.4	82.7	82.7	82.8	83.0	83.1	83.1	83.1	83.6	83.1	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	77.2	77.4	77.6	77.8	78.0	77.9	78.1	78.4	78.7	78.3	76.6	77.3	77.7	77.9
Healthy life years at birth females	54.8	58.3	58.6	57.7	58.1	58.7	58.7	57.9	57.0	56.5	67.5	62.0	62.1	61.5	63.3
Healthy life years at birth males	54.5	58.7	59.0	56.4	57.1	57.9	57.9	57.4	57.8	56.4	65.3	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	60	56	52	51	50	47	120	118	118	113	116	64	138	131	127
Infant mortality rate per 1 000 live births	3.9	3.8	3.9	3.5	3.5	3.4	3.6	3.3	3.3	3.2	3.3	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.9	2.8	2.7	2.8	3.1	3.0	3.0	3.0	3.0	3.1	3.1	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.3	2.3	2.3	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.6	1.5	1.5	1.6	1.7	1.7	1.5	1.5	1.5	1.6	1.6	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.3	0.3	0.4	0.4
Prevention and public health services	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
Health administration and health insurance	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.6	2.5	2.4	2.5	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.1	2.1	2.1	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.2	1.1	1.2	1.2	1.4	1.4	1.3	1.2	1.3	1.3	1.3	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.2	0.2
Prevention and public health services	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
Health administration and health insurance	0.4	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.11.2: Statistical Annex - continued - Germany

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	27.8%	27.8%	27.3%	27.1%	27.3%	27.5%	27.8%	27.8%	27.6%	27.6%	27.4%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	0.8%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	1.0%	1.0%	1.0%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	22.5%	22.5%	22.5%	22.7%	22.6%	22.6%	22.8%	22.8%	22.6%	22.4%	22.3%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	15.4%	15.0%	15.3%	15.3%	15.2%	15.0%	14.2%	14.1%	14.0%	14.4%	14.3%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	5.1%	5.2%	5.2%	5.1%	5.1%	5.2%	5.2%	5.4%	5.5%	5.5%	5.5%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	3.1%	3.2%	3.4%	3.4%	3.4%	3.2%	3.1%	3.1%	2.9%	3.0%	3.0%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	5.5%	5.4%	5.2%	5.2%	5.2%	5.3%	5.2%	5.1%	4.9%	4.7%	4.8%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	32.7%	32.7%	32.0%	31.7%	31.2%	31.4%	31.8%	32.0%	31.6%	31.5%	31.1%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	1.0%	1.2%	1.3%	1.3%	1.2%	1.2%	1.1%	1.1%	1.2%	1.2%	1.2%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	20.5%	20.6%	20.5%	20.5%	21.8%	21.7%	21.9%	21.8%	22.3%	22.0%	21.9%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	14.9%	14.8%	15.3%	15.3%	15.2%	14.8%	14.1%	13.8%	13.7%	14.3%	14.2%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	3.4%	3.5%	3.4%	3.5%	3.3%	3.3%	3.4%	3.3%	3.4%	3.7%	3.6%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	3.6%	3.8%	4.1%	4.1%	3.7%	3.5%	3.4%	3.3%	3.2%	3.2%	3.2%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	5.4%	5.2%	5.0%	5.0%	5.9%	6.0%	5.9%	5.8%	5.5%	5.3%	5.2%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	:	:	:	:	:	2.70	2.83	2.81	2.87	3.05	3.36	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.7	0.8	0.8	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	3.0	2.9	3.0	3.1	3.1	3.2	3.3	3.3	3.3	3.5	3.5	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	13.6	:	:	15.8	14.7	:	:	:	15.7	16.4	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	23.2	:	:	22.8	21.9	:	:	:	20.9	:	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	11.7	11.8	11.5	11.4	11.2	11.2	11.2	11.2	10.9	11.0	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	340	344	349	354	362	371	380	387	400	411	414	324	330	338	344
Practising nurses per 100 000 inhabitants	1116	1128	1150	1174	1204	1214	1229	1238	1290	1324	1334	837	835	825	833
General practitioners per 100 000 inhabitants	67	66	66	65	65	66	66	65	66	67	66	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	8.1	7.9	8.1	8.6	9.2	9.9	9.7	9.7	9.9	9.9	10.0	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	21	21	22	23	23	23	24	24	24	25	25	17	16	16	16
Day cases discharges per 100 000 inhabitants	591	576	578	596	613	629	647	655	656	676	677	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	76.0	77.0	78.7	79.1	79.2	79.0	79.0	79.2	79.3	79.7	79.8	77.1	76.4	76.5	76.8
Hospital average length of stay	8.8	8.7	10.1	9.8	9.7	9.5	9.3	9.2	9.1	9.0	9.0	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.7	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	7.4	7.5	7.6	7.7	7.8	8.0	8.1	8.2	8.1	8.1	8.1	8.1	Germany	EU	
AWG risk scenario	7.4	7.6	7.8	8.0	8.2	8.5	8.7	8.8	8.9	8.8	8.9	8.9	0.7	0.9	
													1.5	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	82.1	83.8	84.4	84.6	84.5	84.1	83.5	82.7	81.8	80.8	80.0	79.3	Germany	EU	
													-3.5	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.12. GREECE

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

In 2015, Greece had a GDP per capita of 21,158 PPS, below the EU average of 29,610. While the economic effects of the crisis cannot be considered fully resolved yet, there are signs that the economy is improving. Greece is now experiencing a period of steady growth. Real GDP is expected to grow by 2% in 2018, strengthening to 2.2 % of GDP in 2019 and 2.3% in 2020⁽¹⁵⁹⁾. Growth in 2019 is expected to be supported by the budget for 2019, which includes discretionary measures to reach a primary surplus of 3.5% of GDP in line with agreed targets⁽¹⁶⁰⁾.

Population was estimated at 10.8 million in 2016. According to Eurostat projections, total population in Greece is projected to decrease to 7.7 million in 2070, with a 28.7% decrease, which goes in the opposite direction of the EU as a whole, projected to increase on average by 2.0%.

Total and public expenditure on health as % of GDP

Total expenditure⁽¹⁶¹⁾ on health as a percentage of GDP, at 8.4%, was below the EU average⁽¹⁶²⁾ of 10.2% in 2015. Public expenditure, at 5.0% of

GDP (2015), showed a wider gap from the EU average of 7.8%⁽¹⁶³⁾.

When expressed in per capita terms, also total spending on health, at 1449 PPS in Greece was below the EU average of 3305 in 2015. Public spending on health care in the same year was 858 PPS vs. an EU average of 2609 PPS. Looking at health care without long-term care⁽¹⁶⁴⁾ reduces the gap relative to the EU average (4.7% vs 6.8% in 2015). In all these cases, after a steady decrease from 2009 onwards until 2014, expenditure recorded an increase in 2015.

Expenditure projections and fiscal sustainability⁽¹⁶⁵⁾

As a consequence of demographic changes, health care expenditure is projected to increase by 1.2 pps of GDP, above the average growth expected for the EU (0.9) according to the "AWG Reference Scenario". When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 2.0 pps of GDP from now until 2070 (EU1.6)⁽¹⁶⁶⁾.

Health status

Life expectancy at birth (83.7 years for women and 78.5 years for men in 2015) is above the respective EU averages (83.3 and 77.9 years of life expectancy)⁽¹⁶⁷⁾ and overall it has increased

⁽¹⁵⁹⁾ The growth forecast reflects a fiscal package that is projected to deliver a primary surplus of 3.5 % of GDP in 2019. That forecast is different from the Commission's 2018 autumn forecast, which was based on a no-policy change assumption given that the final package was not yet finalised at the time of its cut-off date. The forecast for 2020 continues to build on the achievement of the fiscal target.

⁽¹⁶⁰⁾ European Commission –DG ECFIN (2018), Enhanced Surveillance Report - Greece, November 2018, European Economy Institutional Paper 090, November 2018.

⁽¹⁶¹⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽¹⁶²⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹⁶³⁾ Figures concerning the share of public expenditure on health in Greece and their interpretation should be treated with caution as the statistics typically do not reflect the actual value of the public provision of goods and services, which largely exceeds the legislated expenditure ceilings captured by the statistics due to the extensive use of payback mechanisms that cover a large share of EOPYYP outpatient public spending.

⁽¹⁶⁴⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹⁶⁵⁾ Greece has just completed the third adjustment programme monitored by the EU, the IMF and the ECB. The medium- and long-term fiscal sustainability indicators S1 and S2 point to remaining challenges to ensure future fiscal sustainability (European Commission (2018), Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_1.pdf).

⁽¹⁶⁶⁾ The 2018 Ageing Report at https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽¹⁶⁷⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database.

slightly since the beginning of the crisis. Healthy life years, at 64.1 years for women and 63.9 for men were above the EU averages of 63.3 and 62.6 in 2015, but they have fallen slightly since 2005. The infant mortality rate of 4‰ was above the EU average of 3.6‰ in 2015, slightly increased since 2005, though with slight fluctuations during the past decade. Amenable mortality in 2015 well matched the EU average of 127 per 100 000 inhabitants.

As for the lifestyle of the Greek population, the proportion of regular smokers, recorded in 2014 (latest available figure) at 27.3% of the population, was above the EU average of 20.9% for 2015⁽¹⁶⁸⁾ and amongst the highest recorded in the EU though a marked decrease has taken place during the past decade from a value of 40% in 2006. Alcohol consumption, at 7.5 litres per capita in 2014, was lower than the EU average of 10.2 in 2015.

System characteristics

System financing, revenue collection, population coverage and role of private insurance and out-of-pocket payments

A mixed system in terms of funding and service delivery operates in Greece. A national health service funded by taxation goes hand in hand with a social health insurance system. A universal health system (ESY) financed on the basis of taxation was introduced in the early 1980s. The mandate of ESY is to provide both primary and secondary care. However, the actual provision of services was characterised by an underdeveloped primary care which resulted in exposing the population to high private expenditure. In terms of provision, public provision via ESY facilities goes in parallel with private provision with a very large number and type of private providers contracted by EOPYY. Private provision expanded rapidly until the eruption of the crisis (total health expenditure stood at about 9% for much of the second half of the 2000s, and roughly about 40% of it was private spending – mostly out-of-pocket payments, as private insurance remained limited).

Data on life-styles is taken from OECD health data and Eurostat database.

⁽¹⁶⁸⁾ The EU average value is recorded for 2009.

Four decades after its establishment, the system had not developed into a typical fully-fledged national health service despite the legal reforms introduced over the 1990s and 2000s. Until the end of 2011, a highly fragmented (multiple funds), occupation-based health insurance system purchased goods and services in parallel and in supplement to the National Health Service.

Until the 2011 reform, when EOPYY (“the National Health Services Organisation”) initiated its activity, the employed population was enrolled in one of the large number of occupation based health insurance funds (the four biggest being IKA (employees), OGA (farmers), OPAD (civil servants) and OAEE (self-employed) and comprising about 80% of the population). Contribution rates varied across funds and each fund provided its own package of health services and goods. There was no risk-adjustment mechanism across funds to account for socio-economic differences and differences in health conditions of each fund’s members. The multiplicity of funding and the fragmentation in the system did not contribute to ensuring good care coordination or defining effective care paths and referral systems, and were instead a significant challenge to equity, efficiency and effectiveness (unequal access to services, unnecessary use of specialists and rapidly rising pharmaceutical expenditure). This was reflected in a diversity of service coverage by social insurance funds enhanced by the different ability of funds to access private services.

The crisis showed that the coverage available to the unemployed for health care benefits offered by social security funds was uneven across funds and largely temporary in the case of some professions. While some groups continued to have coverage two years after becoming unemployed (e.g. those insured with IKA), certain groups lost coverage immediately (e.g. many of the self-employed professions). The coverage for those who became uninsured or those who could not afford their health insurance fees was limited to very low incomes (only those whose family income was below €5,000 and held the so-called poverty booklet had access to the whole range of health care services for free).

Many Greek citizens lost their employment status and therefore the insurance status, losing their

access to medicines, diagnostic tests and non-emergency primary and secondary care. Preventive care such as vaccination, emergency care and care to chronic diseases was instead reportedly provided to everyone. Whether in practice access was provided to uninsured persons anyway, notably in terms of primary and hospital care under ESY, is unclear ⁽¹⁶⁹⁾.

The economic and sovereign crisis made health system reform a key priority and a major requirement of the economic adjustment programme. The merging of all public health insurance funds into a unified health fund (EOPYY), initiated with Law 3918 of 2011 (and subsequent legislation), constitutes a major development in health insurance with the aim to equalise contribution rates and health care benefits across occupational groups, for those employed and their dependents. EOPYY became the fully-fledge purchaser of health and services, while ESY and private providers provide the necessary health goods and services. While the implementation of EOPYY has been an improvement so far, some challenges remain, notably the effective allocation of assets to EOPYY, the persistence of arrears in their payments to public and private providers and the collection of contributions and the lack of a comprehensive primary care network and service. As signalled by a density of GPs that is lower than half that of the EU average (32 vs. 78 per 100 000 inhabitants in 2015) ⁽¹⁷⁰⁾, the primary health care sector has been historically been underdeveloped.

In addition the authorities consolidated and strengthened existing policies to ensure a coherent and universal coverage of all residents and citizens independent of their occupational status. In the recent past, the Greek government had passed several Ministerial Decrees to grant access to the uninsured to primary health care (December 2013), secondary care and diagnostics (July 2014) as well as pharmaceuticals (July 2014).

Due to reported administrative hurdles, the government did not proceed with full

⁽¹⁶⁹⁾ According to several reports, the uninsured did continue to receive care unofficially from different health care providers especially NHS (ESY) providers, but this was left to the discretionary decision of providers and not necessarily done in a systematic manner.

⁽¹⁷⁰⁾ See section "Coverage of services, types of providers, referral systems and patient choice".

implementation and the establishment of universal coverage required additional legal provisions. Reportedly, up to 2016, over 2,000,000 people were still estimated to have no health care coverage due to unemployment (of the individual or of the household head upon whom they depend) or due to discontinued payment of contributions. Whereas it seems that uninsured did receive free hospital care, although not full, it is extremely difficult to estimate the real level of access at the time ⁽¹⁷¹⁾. The actual implementation of universal coverage was thus granted by the "Social Bill" of February 2016, which consolidated and improved previous provisions, tackling the issue of universal coverage, addressing the existing administrative shortcomings ⁽¹⁷²⁾ and extending coverage to refugees and other vulnerable groups in response to recent migration flows.

The share of private expenditure on health in total health expenditure (40.7% in 2015) is far higher than the EU average of 21.6% for the same year. Most is out-of-pocket for private care or for private providers with a contract with EOPYY. Out-of-pocket expenditure constitutes about 35.5% of total current health expenditure, far above the EU average (15.9% in 2015). Though with some fluctuations over the last decade, the value is relatively similar to the one prior to the crisis in 2005 (34.8%). To a large extent, this is due to overconsumption and to higher than average prices of healthcare goods and services. To tackle the first issue, several measures to monitor, control and sanction, where appropriate, the behaviour of providers were introduced over the years. In parallel, some co-payments were revised upwards. Hospital care is delivered free of charge in public hospitals of the National Health System (ESY). As for contracted private clinics the amount patients contribute depends on the reimbursement system ⁽¹⁷³⁾. For private clinics not contracted by EOPYY, full charges apply.

⁽¹⁷¹⁾ Recent figures provided by the OECD report a level of coverage of 86% in 2015.

⁽¹⁷²⁾ For instance removing the obligation for a committee to assess eligibility, which was reportedly hindering implementation in many cases.

⁽¹⁷³⁾ When Diagnosis-related Groups (DRGs) (Κλειστό Ένοποιημένο Νοσήλειο- KEN) apply, insured pay a 30% contribution. When daily fees apply, they pay a 10% contribution

<http://www.missoc.org/missoc/informationbase/comparativ>

A 15% co-payment for clinical tests when using private providers contracted by EOPYY, in tandem with 25% co-payment for a range of prosthetic devices, orthopaedic materials and respiratory devices, and a ceiling on consumables, such as diabetic test strips, injection needles etc. Cost-sharing also applies to pharmaceuticals (a share of the price of either 0%, 10% or 25%) depending on severity of condition with exemptions for chronic conditions and for those with a chronic condition ⁽¹⁷⁴⁾ that opt for generics.

At the same time existing exemptions from user charges for some groups have been rationalised (e.g. for the chronically ill persons exemptions are strictly related to their chronic illness).

Despite the increase registered in co-payment rates, parallel measures adopted to lower prices of goods, such as pharmaceuticals ⁽¹⁷⁵⁾, and services, have lowered the basis on which the patients participation is calculated. However for policies to realise the full potential in terms of containing costs for patients, the joint effort of all stakeholders is essential.

Administrative organisation and revenue collection mechanism

The Ministry of Health develops the national health policy strategy, defining public health and policy priorities, specifying the regulatory framework, defining the system organigram and providing the overall management of the health care system as a whole. The Ministry of Health through EOPYY provides goods and services to residents and citizens of Greece.

EOPYY, the National Health Services Organisation purchases the goods and services for its insurees. At the moment the Social Security Funds continue to collect health-related contributions from those insured and submit them to EOPYY. EOPYY then commissions providers of health care, both public and private.

etables/missocdatabase/comparativeTablesSearchResultTree.jsp, accessed 8 March 2016.

⁽¹⁷⁴⁾ For the category entitled to 10% copayment, this is currently not paid if the patient chooses a generic drug.

⁽¹⁷⁵⁾ See section "Coverage of services, types of providers, referral systems and patient choice".

EOPYY and ESY are also funded from the State general budget. The budget for ESY is defined annually in Parliament when the general Budget is approved. In recent years, authorities have tightened the monitoring over the budget execution of both ESY and EOPYY. The information system has been strengthened and financial flows are regularly followed up on both an accrual and cash basis.

There are also seven Regional Health Authorities and their role vis-à-vis the administrative regions is under evaluation. Nevertheless, decision-making remains highly centralised (which may actually have helped with the implementation of cost containment policies in recent times).

EPY is the centralised purchasing agency for the Ministry of Health and tenders for and purchases centrally medicines and medical devices. The National Agency for Pharmaceuticals (EOF) is in charge of developing and implementing pricing and reimbursement policies, clinical and economic evaluation. IDIKA, the IT agency for the Ministry of Labour maintains the e-health prescription system and monitoring prescription together with EOPYY who receives the data on a daily basis.

Coverage of services, types of providers, referral systems and patient choice

ESY comprises primary and secondary specialist and hospital care through a network of public facilities. In some rural areas it is the main provider of care. In Greece a mixed system of service delivery by public and private providers exists and there are a range of public and private care providers. Public providers include the ESY health centres plus the former health centres of IKA that have come under EOPYY and that have now been moved under ESY and the outpatient and inpatient departments of public hospitals and public laboratories. Private providers either under a contract with EOPYY or paid out-of-pocket by the patients include a large variety of laboratories, diagnostic centres and hospitals from small to very large companies. EOPYY defines the services included in the statutory provision. The services provided by ESY are not necessary explicitly defined.

Poor coordination between primary and secondary care is a major predicament of health care in

Greece. The re-modelling of the primary health care system and of EOPYY aimed to help set up an effective referral/gate keeping system. The amalgamation of most health insurance funds under a single organisation (EOPYY) also constituted a significant step towards improving primary care organisation and provision. Similarly, the transformation of EOPYY into a commissioner of health care rather than a provider means that its former hybrid form as a funding agency (for both primary and hospital care) but also a provider of primary care services, as well as a contractor of services to and buyer of services from private providers – has been rationalised. In 2014, all primary health care centres of public nature have been grouped under the common label of PEDY (National Primary Healthcare Network). De facto, primary care provision has remained inadequate as PEDY provided primary care was not sufficient to cover the population's needs. This led to access to primary care through EOPYY's contracted private providers, for those who could afford it and to low-quality service and long waiting lists for vulnerable groups. Addressing this shortcoming is a current policy priority and the implementation of a comprehensive network of primary health care over the territory is currently ongoing. The authorities are rolling-out a system of primary health care based on the creation of multidisciplinary teams built around family doctors, who will be the first point of contact between patients and the health care system, with compulsory patient registration and gatekeeping.

The number of practising physicians per 100 000 inhabitants⁽¹⁷⁶⁾ (632 in 2015) is largely above the EU average (344 in 2015) and has continuously increased since 2005 (506), both before and after the crisis. Data on the physician skill-mix indicates that the number of GPs per 100 000 inhabitants (32 in 2015) is lower than half of the EU average (78), which is low but more than twice as high its level a decade ago (14 in 2005). This represents part of the authorities' effort to improve primary care provision. The number of nurses (321 in 2015) per 100 000 inhabitants is itself far below the EU average (833 in 2015). The reported figures point at an oversupply of doctors and undersupply of

nurses, which is indicative of an inefficient allocation of resources.

In 2015 Greece had 360 acute care hospital beds per 100 000 inhabitants slightly lower than its 2005 value of 386), and below the EU average of 402 for the same year. Greece displays higher than average rates of MRI units (2.43 vs EU 1.5 for the latest recorded value in 2013), angiography units (1.1 vs EU 0.9 in 2013) and CT scanners (3.5 vs EU 2.1 in 2013) per 100,000 inhabitants.

Purchasing, contracting and remuneration mechanisms

Remuneration is defined by the government. All ESY doctors in primary or secondary care are paid on a salary basis and directly by the Ministry of Finance. Hospitals are allocated resources setting the budget on the basis of historical and prospective costs, but the authorities plan to develop a Diagnosis-Related Group (DRG)⁽¹⁷⁷⁾ system to be used for hospital remuneration. In addition to the transfers from the Government, hospitals generate their own revenue, though a very limited share of the total⁽¹⁷⁸⁾, through special services (e.g. individual private rooms) and from privately insured patients in the so-called afternoon practice.

There has also been some progress in establishing a DRG-based hospital payment system in order to ensure effective reimbursement of hospitals. The first step was to develop KEN-DRGs in 2011, to define standard patient cases and calculate the respective hospital costs and use these to bill EOPYY, private insurance companies and private patients. Work is still on-going but progress is currently uncertain.

Doctors in private practices are paid a fee for service in the case of most diagnostics and outpatient consultations and on the basis of a "DRG-KEN" costing structure in the case of private hospitals.

⁽¹⁷⁷⁾ Κλειστά Ενοποιημένα Νοσήλια (KEN) in Greek.

⁽¹⁷⁸⁾ The share is estimated not to exceed 10%.

⁽¹⁷⁶⁾ OECD data: no data series available for the variable "practicing physicians" due to technical issues. Physicians licensed to practice is used here as a proxy.

The market for pharmaceutical products, the use of Health Technology Assessment and cost-benefit analysis

Major developments in this area embrace higher control over medical prescriptions (e-prescribing and e-diagnosis systems), the development of clinical protocols, new pricing rules for pharmaceuticals and changes in procurement processes.

A new pricing and regulation system was introduced in 2010. The price of drugs is set on the basis of the average price of the three lowest-priced markets in the EU. A drug-pricing observatory was established for this purpose and about 12,000 pharmaceutical products started being re-priced on the basis of the new system (a price list is set two times yearly) ⁽¹⁷⁹⁾. A number of drugs were also eliminated from the “positive list” of drugs (reimbursed drugs). Yet the pricing mechanism still requires adjustments so as to become more transparent and to reduce the number of complaints and potential confusion caused by several revisions of the same list.

Increasing the market share of generics and regulating their prices are also major objectives of past and current Greek governments. E-prescription and prescription by active substance (INN - International Non-proprietary Name) are now compulsory. The pharmacist is obliged to dispense the generic with the lowest price, but, according to evidence, this is not happening. If the patient chooses the branded name instead, s/he has to pay 50% of the difference between the reference price and the actual price of the branded medicine (while lately the Ministry of Health raised this charge to the full price difference). Very recently, further legislation amended this mechanism to limit the patients' participation to 20 euros.

The market penetration of generics remains limited ⁽¹⁸⁰⁾, though their share has recently increased following ad-hoc measures adopted by the authorities, such as eliminating any charge to the patient in case of a difference between the reimbursement price and the actual price for generics, the elimination of co-payments on generics for patients suffering from chronic

conditions and the introduction of an incentive for pharmacists proportional to the share of non-generics dispensed. Combining electronic prescription with compulsory use of prescription guidelines/protocols for physicians drawing upon the IDC10 (International Statistical Classification of Diseases and Related Health Problems) is another component of the on-going reform. This is attempted initially for the expensive medicines and those most widely used. Only over 2018, twenty new therapeutic protocols have been added to the e-systems.

The rationalisation of expenditure observed for pharmaceuticals has mostly concerned outpatients, while hospital drug expenditure has been rising (largely due to the transfer of dispensing of expensive drugs to hospital pharmacies). The introduction of an expenditure ceiling for hospital pharmaceuticals was therefore deemed necessary during the last programme, to ensure expenditure was kept under control. In parallel, centralised tenders and international e-auction procedures for hospital procurements were launched, but remain limited.

Given the fact that drugs expenditure increased exceptionally fast during the 2000s reaching the highest level in the EU with 2% of GDP in 2009, rationalising and containing of pharmaceuticals expenditure has been a top priority and has been carried out successfully in recent years, reaching the level of 1.2% of GDP in 2016 (notably, still above the EU average of 0.8% of GDP for public outpatient expenditure). Significant cost-savings have so far been achieved through the introduction of e-prescribing and e-referral systems (initially on a pilot basis, but made progressively compulsory for all outpatient medical acts under ESY and EOPYY – including drugs, referrals and diagnostics). Accompanying measures include: compulsory prescription guidelines and therapeutic protocols, incentives and obligations (for medical staff) to use generics, the regular revision of drugs' prices, the reduction of the profit margin for pharmacies, and the automatic clawback (outpatient and inpatient), which has preserved prices and volumes from otherwise stricter necessary downwards revisions. Also, the “positive list” of drugs is periodically revised. The past introduction of many high-cost drugs into the positive list without a proper assessment of cost-effectiveness led to an increase in pharmaceutical

⁽¹⁷⁹⁾ This may become only once per year starting from 2019.

⁽¹⁸⁰⁾ The Role of Generic Medicines in Sustaining Healthcare Systems: A European Perspective, IMS (2015).

spending countering the effect of regulated prices. The need to rationalise the criteria for introduction led the authorities to the creation of a committee in charge of health technology assessment (HTA) to evaluate the introduction of new drugs into the positive list based on cost-effectiveness and affordability criteria. Since its inception, the committee has formulated the assessment jointly with the application of an external reference criterion. As a further step, the authorities have worked on legislation to establish a full-fledged HTA agency with the aim to exclusively use the internal HTA assessment as criterion for introduction once the capacity building has been completed. Co-payments (for pharmaceuticals, diagnostic tests and use of private clinics) increased too, while exemptions have been drastically reduced.

Prescription patterns by EOPYY doctors are closely monitored through the web-based application used for e-prescription and e-diagnosis. Hence, real time information is available, on the basis of which detailed auditing on pharmaceutical prescription and expenditure is carried out (on volume and value, use of generics and off-patient drugs, on rebate etc.). Individual prescription behaviour, in comparison to peers, is also monitored and assessed (every month), and in the case of non-compliance with guidelines, penalties could be imposed on physicians. Nevertheless, despite these significant innovations, major stumbling blocks remain in performance terms, due to resistance from main stakeholders, in particular doctors and pharmacists.

E-health (e-prescription, e-medical records) and information and reporting mechanisms

Greece has an e-prescription system, run by HDIKA that includes prescription for pharmaceuticals, referrals and diagnostics. A prescriptions' processing unit in EOPYY collects all the data of prescribing, both the electronic prescriptions and handwritten and scanned ones and has developed a Business Intelligence system producing both fixed reports as well as reports generated ad-hoc.

In addition, a personal health insurance file is being developed, containing data for all hospitalisations, health services, materials and diagnoses of a patient. The data are computerised

and the coverage is national. This will be further enhanced by adding information on laboratory exams recorder by diagnostic centres. EOPYY recently introduced registries for certain diseases (hepatitis C, chronic myeloid leukaemia and multiple sclerosis) with the goal to expand it in the future. Each registry lays down who is suffering from a particular disease, what medication is prescribed and how far advanced the disease is. The registry can help to check how money is spent also how much money is spent. It will enable authorities to assess whether the money is being correctly spent and make forecasts on future costs, which supports negotiations.

These tools can help improving monitoring and control of prescription and consumption of services and goods and will render a future referral system and care coordination more effective, reducing the use of unnecessary pharmaceutical, specialist and hospital emergency care.

Health promotion and disease prevention policies

In 2015, public and total expenditure on prevention and public health services as a % of GDP were lower than the EU average (0.1% and 0.1% vs. 0.3% and 0.3% in the same year) which also characterised recent years. Public and total expenditure on prevention and public health services as a share of current health expenditure (public and total, respectively) are, similarly, both below the EU average (2% vs. 3.2% and 1.3% vs. 3.1% respectively in 2015).

Transparency and corruption

In past years, there have been reports of corruption in the system ⁽¹⁸¹⁾, in the form of bribery in medical service delivery (informal payments to obtain better services or to jump queues, incorrect/undue charges, collaboration between physicians and pharmaceutical companies, and prolongation of hospitalisation), procurement corruption (favouring of specific providers and putting obstacles to competition) and misuse of (high) level position. It is important to assess to what extent the measures addressing public

⁽¹⁸¹⁾European Commission (2017), "Updated Study on Corruption in the Healthcare Sector", Directorate-General Home Affairs.

procurement adopted so far have positive effects in this field and to design further improvements to completely eliminate corruption.

Furthermore, although there has been important progress in safeguarding the independence of hospital managers the last years, the system has not fully succeeded in isolating political interventions from decision making.

Recently legislated and/or planned policy reforms

In recent years, the authorities have taken several steps to improve health care delivery in Greece.

The creation of EOPYY was an important step in improving equity in financing and access to care. With EOPYY, contribution rates across professions and population groups were harmonised considerably (only those previously in OGA continued paying a lower amount and had access to a more limited set of benefits). The programme also included the introduction of centralised tendering of specific hospital supplies, which has led to significant savings, as the differences in prices paid by different hospitals have been eroded. However, the proportion of purchasing that is conducted through centralised tendering is still relatively low, indicating there is still scope to achieve further increases in efficiency.

Many of the measures adopted so far have also helped reduce fraud and waste. Improved budgeting and transparency, regular monitoring and e-prescription have made it easier to detect irregular behaviour. More reforms can be undertaken in this direction, such as electronic queuing systems for referrals to secondary care, which should result from the referral system of the new primary health care, network, increases in centralised tendering and, as mentioned in the paragraphs above, the introduction of DRGs.

Under the programmes, the Greek government has undertaken measures yielding substantial savings on pharmaceuticals in line with best international practice:

- Setting up of an electronic prescription system to enable control and monitoring of prescription behaviour, as well as the

implementation of electronic prescription guidelines.

- Pricing based on the three-lowest EU prices.
- Establishment of an evidence-based positive list of drugs that are reimbursed by EOPYY.
- Promotion of generic medicines and reduction of over-prescription and fraud by INN prescribing.
- Establishment of an annual expenditure ceiling and claw back system to enable control of expenditure on pharmaceuticals (inpatient and outpatient) all of which have been extended up to 2022.
- Establishment of pharmaceutical co-payments from 25% to 10%, while setting up a list of exemptions to ensure access.
- Establishment of Health Technology Assessment Committee – (Επιτροπή Τεχνολογιών Υγείας). The aim of the Committee is to deal with the bargaining of prices for the new, innovative and expensive medicines, in this way, the access of the patients to new and innovative treatments will be ensured with low budgetary cost for the health system.
- Set-up of the committee for the pre-approval of high-cost drugs and the expansion of patient registries.

As a result of the above reforms, public reimbursed expenditure on pharmaceuticals has gone from above 5bn at the start of the programme to a budgetary cost of about 2bn in 2014 and is legislated to remain at this level until 2022.

There were also several measures to rationalise public spending on private services delivered by private providers contracted by the EOPYY. Based on observed and projected expenditure trends, the authorities developed several tools to improve the monitoring of irregular behaviour by providers, typically supply-induced demand of diagnostics and/or other medical treatments and not infrequently, fake expenditure submissions for reimbursement. This is also due to the

improvements in the auditing procedures, which are expected to eventually be applied ex-ante (as pre-approval). Though there have also been attempts to regulate the reimbursed tariffs of diagnostic tests, there seems to still be scope for improvement in this area. Another new policy introduced by EOPYY relates to the new rules on reimbursement, adopted following recording expenditure slippages in items directly reimbursed to patients. EOPYY will reimburse the providers directly instead of reimbursing the patient (which was the previous practice). The patient no longer has to pay in advance and EOPYY has greater control on expenditure by regulating tariffs.

Expenditure ceilings, binding up until 2022, also apply to almost the entire budget of EOPYY and include all expenditure on diagnostics and private clinics.

Until recently, public hospitals faced significant deficits. These deficits were addressed periodically through ad-hoc state subsidies derived from taxation revenues and often resulted in payment arrears to providers. The reasons were manifold and included delays in payment by SSFs combined with low statutory fees paid by SSFs for hospital services, in comparison to actual per diem costs, but also poor IT systems, poor budgeting and accounting systems combined with poor monitoring which led to a lack in transparency of financial and care activities carried by hospitals. In addition, an inefficient procurement of pharmaceuticals and medical supplies led to high prices and large variations in the prices paid by different hospitals. More generally, a proper incentive structure to deliver cost-effective services and stay within their budgets was absent. Such incentives common in other Member States include a mix payment system and performance assessment mechanisms. More recently, improved IT and modern accounting systems have been established (accrual accounting has been introduced in addition to cash accounting), with balance sheets for all hospitals, unpublished for several years, now regularly published online. Hospital funding and funding flows from various sources are now transparent and monitored on a regular basis and arrears have been significantly reduced. However the resources available do not seem to be allocated efficiently. There is one general budget for the healthcare sector, but this budget is not divided between hospitals or between

specific departments within a hospital, e.g. cardiology. Reportedly, it is not transparent how the money is spent and the system does not yet provide any incentives to spend the money efficiently. A physician does not have a budget to manage but he is free to choose how much to spend on items such as equipment or devices and the costs will be covered by the hospital ⁽¹⁸²⁾.

Performance indicators have been introduced in order to assess the performance of hospitals and identify specific challenges, but they don't seem to be published regularly and to shape hospital policies. Centralised purchasing had been introduced with the Health Procurement Commission (Επιτροπή Προμηθειών Υγείας-ΕΠΥ) even if at slow speed with important savings, sometimes reaching more than 50% in price reduction paid for some medicines and medical supplies. However, the work of ΕΠΥ has been discontinued and existing tenders were left on hold until the recent adoption of legislation to re-engineer centralised procurement in health care.

The replacement of ΕΠΥ by the National Health Authority (Εθνική Κεντρική Αρχή Προμηθειών Υγείας - ΕΚΑΠΥ) took place recently. The aim of the new authority is to centralise the purchasing of health supplies and to improve on the pre-existing system, in order to achieve economies of scale in the short term. The new body in charge of centralised procurement ΕΚΑΠΥ has recently approved the Operational Plan for the next two years (until 2019), with the goal to increase the share of items procured centrally to be 30% of the total value of hospital expenditure.

Greece has recently concluded the ESM programme monitored by the EU, the IMF and the ECB. The commitments have been fulfilled by the authorities and policies are being developed accordingly to meet the agreed targets under the Enhanced Surveillance procedure linked with the reform work streams that are intrinsically medium/long-term and exceeded the horizon of the programme, such as the implementation of primary health care, centralised procurement, and several

⁽¹⁸²⁾European Commission (2017), "Updated Study on Corruption in the Healthcare Sector", Directorate-General Home Affairs.

other measure to enhance the cost-effectiveness and the modernisation of the health care system.

The most relevant reform of the health care system has probably been the introduction of universal coverage in Greece, a defining trait of modern EU health care systems that addressed and solved the post-crisis coverage gap of at least two million uninsured people and established the right to health care coverage for all Greek citizens. Recently, legislation was passed to resolve the hurdles of the pre-existing legislation on the coverage of uninsured Greek citizens and to accommodate the incoming flows of migrants. This legislation contained other measures to improve the functioning of the healthcare sector, such as a human resource strategy to increase staff and re-qualify the existing one to support the development of a primary health care network over the territory.

In general, policies have been developed to support the goals of greater generics penetration, more rational prescribing patterns, rationalisation of healthcare expenditure, promotion of higher transparency in the system, elimination of waste, greater transparency and elimination of corruption. In practice though, progress is slow and uncertain in these areas, but the authorities strongly committed to furthering these goals and to proceed with the implementation of ongoing reforms in their Growth Strategy.

Challenges

The analysis above shows that several reforms have been implemented in Greece over the last five years. However, the current incentives present in the system are not necessarily conducive to the use of cost-effective interventions, while individuals pay a significant share of expenditure directly out of their own pockets. On the basis of the analysis the main challenges for the Greek health care system are as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated care as well as a focusing on costs, to tackle the impact on spending due to population ageing and non-demographic factors. To this end, rationalise health care expenditure by discouraging the overuse of products and services. In addition to encourage

the use of generics, to improve hospital management, to strengthen public procurement and to further the efforts in the development of protocols for treatment.

- To improve the basis for more sustainable and efficient financing of health care in the future, aiming at a better balance between resources and spending. This can reduce the size of private payments through enhanced coverage and reduce inequalities in the access and quality of care and its distribution between population groups and regional areas. To tackle the issue of arrears in payments by EOPYY.
- Despite the observed progress in pharmaceuticals expenditure, more efforts are needed to ensure that spending stays within the envelope and that spending targets are not achieved just due to the implementation of established cost-containment mechanisms (clawbacks), for instance, further increasing the penetration of generics, expanding the application of therapeutic protocols and consolidate and expand the use of HTA to evaluate pharmaceuticals.
- To reduce the excessive use of secondary specialist and hospital care. To promote greater efficiency in the hospital setting, including by rationalising the use of resources to ensure all capacity within public hospitals is utilised. To this end, consider whether there is scope to regulate the flows of patients towards private providers by linking this possibility to a threshold in terms of waiting time/local capacity. In addition, consider adjusting the existing reimbursement schemes to increase efficiency and productivity in the delivery of hospital services and implement a proper DRG system.
- To implement a comprehensive strategy for primary health care over the territory, for it to act as a gatekeeper. To adjust staff training and the staff skill mix towards having more primary care doctors and nurses, correcting the current inefficient allocation of resources that sees an oversupply of doctors and an undersupply of nurses. It should consolidate the existing financial and non-financial incentives including the extent of cost-sharing to encourage the

proper use of primary care. Relatedly, authorities should improve follow-up care so as to reduce the unnecessary use of acute care settings for long-term care patients. To this end, to make use of the existing e-health tools.

- To improve governance (general coherence and management) of the health care sector for instance by clearer definition of strategic, evidence-based objectives and by strengthening technical expertise. To tackle the issue of corruption and to eliminate waste.
- To enhance and continue data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted and used to continuously improve access, quality and sustainability of care. This includes efforts to assess and publish evaluations of the quality of care provided for example.
- To make more use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing to induce cost-effective behaviour.
- To enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, lack of exercise, obesity).
- To ensure access to primary and secondary health care of the vulnerable groups, particularly the uninsured. In that respect, close monitoring of the respective costs will be necessary, particularly those related to the health needs of the refugee/migration flows in order to disentangle the relevant budgetary effects and seek for the appropriate EU funding.

Table 2.12.1: Statistical Annex – Greece

GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP, in billion Euro, current prices	199	218	233	242	238	226	207	191	181	179	176	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	25.1	26.3	26.0	25.2	23.2	21.5	19.6	19.0	19.5	20.5	21.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	0.3	5.3	3.0	-0.6	-4.6	-5.6	-9.0	-6.8	-2.5	1.4	0.4	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	:	:	:	:	-12.2	-6.0	-11.8	-2.6	-11.5	4.6	3.7	0.2	0.2	4.1
Expenditure on health*	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Total as % of GDP	:	:	:	:	10.2	9.5	9.8	9.3	9.3	8.1	8.4	10.2	10.1	10.1	10.2
Total current as % of GDP	8.2	8.2	7.9	9.0	9.5	9.6	9.1	8.8	8.3	7.9	8.4	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	:	:	:	:	0.7	-0.1	0.7	0.5	0.9	0.1	0.0	0.9	0.6	0.2	0.3
Total per capita PPS	:	:	:	:	2,312	2,042	1,931	1,694	1,611	1,400	1,449	2,745	2,895	2,975	3,305
Public total as % of GDP	5.9	5.7	5.7	5.6	6.6	6.6	6.0	5.8	5.2	4.6	5.0	8.0	7.8	7.8	8.0
Public current as % of GDP	5.6	5.7	5.6	5.5	6.5	6.6	6.0	5.8	5.2	4.6	5.0	7.7	7.6	7.6	7.8
Public total per capita PPS	1,139	1,204	1,267	1,287	1,487	1,430	1,191	1,066	902	804	858	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.36	0.03	0.07	0.08	0.06	0.04	0.04	0.03	0.03	0.03	0.04	0.2	0.2	0.2	0.2
Public as % total expenditure on health	:	:	:	:	64.3	70.0	61.7	62.9	56.0	57.4	59.3	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.1	14.2	14.2	13.1	12.0	11.3	9.9	8.8	7.4	9.2	8.1	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	:	:	:	:	:	:	86.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	34.8	32.9	34.6	37.9	29.3	28.1	30.9	30.5	34.0	36.8	35.5	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	11.0	11.0	11.0	11.1	11.1	11.1	11.1	11.1	11.0	10.9	10.9	502.1	503.0	505.2	508.5
Life expectancy at birth for females	82.5	82.7	82.5	83.0	83.3	83.3	83.6	83.4	84.0	84.1	83.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.8	77.1	76.9	77.5	77.5	78.0	78.0	78.0	78.7	78.8	78.5	76.6	77.3	77.7	77.9
Healthy life years at birth females	67.4	68.1	67.6	66.2	66.8	67.7	66.9	64.9	65.1	64.8	64.1	62.0	62.1	61.5	63.3
Healthy life years at birth males	65.9	66.5	66.0	65.6	66.1	66.1	66.2	64.8	64.7	64.1	63.9	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	110	104	97	92	86	79	129	133	125	125	127	64	138	131	127
Infant mortality rate per 1 000 live births	3.8	3.7	3.5	2.7	3.1	3.8	3.4	2.9	3.7	3.7	4.0	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
												2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	3.7	3.8	3.3	3.7	3.3	3.1	3.4	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	2.2	2.1	2.0	1.6	1.7	1.6	1.8	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	2.0	2.1	2.3	:	2.6	2.7	2.8	2.6	2.3	2.1	2.2	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.3
Health administration and health insurance	:	:	:	:	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	3.1	3.0	2.4	2.7	2.3	2.0	2.2	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	0.7	0.7	0.7	0.6	0.8	0.7	1.0	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.5	1.6	1.8	:	2.0	2.1	2.1	1.8	1.4	1.1	1.1	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2
Prevention and public health services	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	:	:	:	:	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.12.2: Statistical Annex - continued – Greece

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	:	:	:	:	39.0%	39.3%	35.7%	41.6%	39.1%	39.3%	40.1%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	:	:	:	:	0.6%	0.6%	0.8%	0.3%	0.4%	0.5%	0.5%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	:	:	:	:	22.9%	21.5%	22.0%	18.5%	20.3%	19.8%	21.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	24.4%	25.8%	29.5%	:	27.1%	28.7%	30.8%	29.0%	27.7%	26.7%	25.9%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	:	:	:	:	2.4%	2.2%	2.3%	2.2%	1.7%	2.4%	2.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	:	:	:	:	1.3%	1.3%	1.2%	1.0%	1.1%	1.5%	1.3%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	:	:	:	:	1.9%	1.8%	2.2%	2.5%	2.8%	3.3%	2.6%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	:	:	:	:	47.0%	45.9%	40.3%	46.7%	44.1%	44.3%	44.0%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	:	:	:	:	0.9%	0.9%	1.2%	0.5%	0.6%	0.9%	0.8%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	:	:	:	:	10.5%	11.1%	11.8%	10.7%	15.5%	15.4%	19.6%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	26.4%	28.1%	33.0%	:	31.0%	32.1%	35.2%	31.0%	26.6%	23.9%	22.6%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	:	:	:	:	2.5%	2.3%	2.5%	2.2%	1.7%	3.0%	3.2%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	:	:	:	:	1.8%	1.8%	1.8%	1.6%	1.7%	2.6%	2.0%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	:	:	:	:	2.3%	2.0%	2.7%	3.1%	3.5%	4.8%	3.4%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	1.32	1.63	1.79	1.96	2.17	2.26	:	:	2.43	:	:	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.9	0.9	0.9	0.9	1.0	1.0	:	:	1.1	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	2.5	2.6	2.9	3.1	3.4	3.4	:	:	3.5	:	:	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.0	0.0	0.0	0.0	0.0	0.0	:	:	0.1	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	16.4	:	17.6	17.3	:	:	:	:	16.9	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	40.0	:	31.8	31.9	:	:	:	:	27.3	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	10.0	9.4	9.7	9.5	9.1	9.0	8.0	8.2	7.5	7.5	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants *	506	541	563	612	621	623	625	627	628	632	632	324	330	338	344
Practising nurses per 100 000 inhabitants	330	321	319	322	331	340	341	333	329	323	321	837	835	825	833
General practitioners per 100 000 inhabitants	14	14	15	17	17	18	20	21	23	30	32	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Note: *EL data is for physicians licenced to practice.															
Outputs															
Doctors consultations per capita	3.9	4.0	:	:	:	:	:	:	:	:	:	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	:	:	19	20	20	20	20	20	20	:	:	17	16	16	16
Day cases discharges per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	6362	6584	7143	7635
Acute care bed occupancy rates	73.0	75.0	72.5	73.4	72.5	70.6	72.3	73.6	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	5.6	5.8	6.9	6.6	6.7	6.6	6.8	7.0	:	:	:	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	:	:	:	:	:	:	:	:	:	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP **	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.0	5.1	5.3	5.5	5.7	5.9	6.1	6.2	6.3	6.3	6.2	6.2	Greece	EU	
AWG risk scenario	5.0	5.3	5.5	5.8	6.1	6.4	6.6	6.8	7.0	7.0	7.0	6.9	1.2	0.9	
Note: **Excluding expenditure on medical long-term care component.															
Population projections															
	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
													Greece	EU	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.13. HUNGARY

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

Hungary has a population estimated at around 9.8 million inhabitants in 2016. With a GDP of around €11 bn, or 17,200 PPS per capita, it is below the EU average GDP PPS per capita of 29,600.

Total and public expenditure on health as % of GDP

Total expenditure ⁽¹⁸³⁾ on health as a percentage of GDP (7.8% in 2015) has decreased slightly over the last decade (from 8.3% in 2005, although it has been relatively flat since 2010), below the EU average ⁽¹⁸⁴⁾ of 10.2%. Public expenditure is lower than in 2005, 5.7% of GDP, though it has been relatively flat since 2007. It is also below the EU average of 7.8% in 2015. Looking at health care without long-term care ⁽¹⁸⁵⁾ reveals a similar picture with public spending being below but slightly closer to the EU average (5% vs 6.8% in 2015).

When expressed in per capita terms, total spending on health at 1457 PPS is far below the EU average of 3305 in 2015. So is public spending on health care: 1006 PPS vs. an average of 2609 PPS in 2015.

Expenditure projections

As a consequence of demographic changes, health care expenditure is projected to increase by 0.8 pps of GDP, below the average growth expected for the EU (0.9 pps of GDP) ⁽¹⁸⁶⁾, according to the

⁽¹⁸³⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽¹⁸⁴⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹⁸⁵⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽¹⁸⁶⁾ I.e. considering the "reference scenario" of the projections (see The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf).

"AWG reference scenario". When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.8 pps of GDP from now until 2070 (EU average: 1.6).

Hungary faces low fiscal sustainability risks in the short run. In the medium and long term the fiscal sustainability risks are high, but the contribution of health care and long-term care is relatively low ⁽¹⁸⁷⁾.

Health status

Life expectancy at birth (79.0 years for women and 72.3 years for men in 2015) is far below the respective EU averages (83.3 and 77.9 years of life expectancy in 2015). However, healthy life years, at birth 60.1 years for women and 58.2 years for men, are closer to the EU averages of 63.3 and 62.6 in 2015. The infant mortality rate of 4.2 deaths per 1000 live births (4.2‰) is higher than the EU average of 3.6‰ in 2015, having gradually fallen over the last decade (from 6.2‰ in 2005).

As for the lifestyle of the population, the rate of daily smokers was 25.8% in 2014, according to Eurostat, above the EU average of 20.9. The obesity rate of the population was at 20.6%, in 2014, the second highest proportion in the EU (after Malta) and far above the EU average of 15.5% in 2014.

Alcohol consumption was 10.9 litres per capita in 2014, above the EU average of 10.2, and it has decreased from 13.2 in 2006.

System characteristics

Coverage

The health care system operates within the scheme of a social security system based on societal solidarity. A Bismarckian model of insurance has been established: the main feature is the right to benefits in exchange for contributions. Health insurance contributions and direct government transfers provide the funding for cash benefits and benefits in kind. Health insurance contributions is

⁽¹⁸⁷⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

proportional to income: In case of employees it amounts to 7% of the gross salary (3 % cash benefits, 4 % benefits in kind). The health care system covers virtually entire population (less than 1% is not covered). Membership is compulsory for all residents.

Gainfully employed and assimilated persons are insured against all risks: employees (including the public sector), the self-employed (including members of co-operatives), several assimilated groups, and beneficiaries of income subsidy, job-seeker benefit and job-seeker aid paid prior to retirement.

Various groups of the not gainfully employed population are entitled to health care benefits: Minors permanently resident in Hungary, persons who have fulfilled the minimum retirement age and whose monthly income does not exceed 30% of the minimum wage, homeless people, prisoners, full-time students, pensioners, beneficiaries of various benefits, allowances, or income supports, persons placed in residential institutions providing personal care, restrained persons, persons whose need has been recognised by the local government (including income supports of the unemployed), social supports, persons whose ability to work is reduced at least by 50%. For those who fall under this category, the central budget transfers a monthly amount of 5,790 HUF/person as health service contribution into the Health Insurance Fund (HIF).

Self-employed persons who perform activities in a complementary way or their joint ventures, and otherwise not insured or entitled persons are obliged to pay a health care contribution (in case of continuous residence in Hungary for a year - HUF 7,320 per month). Financing for groups covered without contributing is provided by the central budget in terms of a fixed per capita fee. Dependant close family members or their spouses are also obliged to pay health care contribution unless they are socially entitled, which must be justified by the local government (and their obligation can also be undertaken).

Persons not insured or not entitled to health care can enter into contractual arrangements with the National Institute of Health Insurance Fund Management (NEAK – Nemzeti Egészségbiztosítási Alapkezelő) for entitlement to

health care services. In case of adults, the contribution amounts to half of the minimum wage, in case of minors and students 30% of the minimum wage (only for benefits in kind –not necessary Hungarian Certificate of domicile).

The government elected in 2010 opted for a systematic move on the way to a national health service by further centralising the allocation of capacities; establishing a new hierarchical system of actively managed patient routes; organising more effective competition of generics in public purchases of pharmaceuticals; and making steps towards replacing contributions by taxes.

Administrative organisation and revenue collection mechanism

The health care budget is made up of three components: (1) the budget of the HIF derived from health insurance contributions and earmarked health care tax (72% in 2016); (2) direct government transfers from the central budget (21% in 2016) and other incomes (7% -social tax, incomes from pharmaceutical companies, accident tax, public health product tax).

In addition, local government budgets are derived from local taxes and from the central government grants for investment. The budget-setting processes at different levels are practically independent, apart from central government subsidies for regional and local levels.

A key principle is the institutional separation of capital and recurrent costs, which applies to all sub-sectors. While investment is decided upon and financed by either local or central government, the HIF covers recurrent costs only.

Since 2012, the hospitals owned by the capital, cities and counties are state-owned. Dual financing still prevails, so recurrent costs are financed by the Health Insurance Fund, while capital costs by the maintainer. However, as the National Healthcare Service Center (earlier: National Institute for Quality- and Organisational Development in Healthcare and Medicines) fulfils maintenance and supervisory duties over state owned health institutions.

Restructuring was launched in 2011, and the operation of the new structure started as of 1 July

2012. The basic principle of the new structure is to centralise specialised care with high costs and relatively low patient numbers. Forms of care with higher case numbers, being less specialised and less costly should be provided close to the population. A change of function or profile refining was introduced for 58 service providers. 4.3% of inpatient care capacities was closed. In line with changes in structure, function and integration, a number of economic interventions aiming at improving effectiveness were introduced - essentially contributing to sustained institutional functioning. Consequently, a part of resources made available could be reallocated to financing outpatient care.

In 2011, the "Simmelweis Plan" reorganised the health care system. The new structure basically centralised the administrative functions and system management under the responsibility of the State Secretariat for Health Care of the Ministry of Human Capacities and related institutions such as the National Institute for Quality- and Organisational Development in Healthcare and Medicines (at present: National Healthcare Service Center), the National Centre for Patient Rights and Documentation and the Office of Health Authorisation and Administrative Procedures. Epidemiological and other public health issues belong to the National Public Health and Medical Officer Service and its affiliates.

The management of the provision of service and patient pathways is split between the level of NUTS3 administrative units and the higher level of health-regions and nationally. Service providers, including outpatient and care centres manage patient pathways at lower levels.

All agents within this system are linked to the HIF, which is in charge of managing the finances of the health care system. The emergence of new institutions in the management of patient pathways means that the importance of the HIF as a central institution in the health sector has been reduced. Its role has been further eroded by the partial devolution of responsibilities to a new network of government offices at NUTS3-level (known as "government windows").

The level of expenditure on the administration of such a system, where entitlements are not linked to contribution payments and virtually the entire

decision-making power rests with the Ministry of Human Capacities, is not high. Public and total expenditure on health administration and insurance as a percentage of GDP (0.15% and 0.14% respectively) are well below the EU average (0.38% and 0.26% respectively in 2015).

Role of private insurance and out of pocket co-payments

In 2015, private expenditure accounted for 31% of total health spending, considerably more than in the EU on average (21.6%). Also very large in comparison to the EU average is the share of out-of-pocket payments (29% vs. 15.9% in the EU).

Types of providers, referral systems and patient choice

Health care provision is the state's responsibility. The delivery system is organised on the basis of "territorial supply obligation", which assigns the responsibility to different levels of government according to the principle of subsidiarity (the service should be provided at the lowest effective level of organisation). This way, municipalities are responsible for providing primary care, while responsibility for secondary and tertiary health care services is the central government's responsibility. Nevertheless, even if obliged by law to provide a given level of care, the local authorities are not obliged to deliver it. Each level is allowed to outsource service delivery to private providers. Moreover, the owner of health care facilities (whether private or public) is obliged to keep it in working order, i.e. to cover capital costs, which is particularly relevant in case of state-owned equipment and facilities being used by private providers to deliver subcontracted services.

Control, coordination, supervision and delivery of public health services are the responsibility of the central government which provides the services through the National Public Health and Medical Officer Service, in some cases in cooperation with the other institutions.

Provision of primary care is within the area of responsibility of the municipalities. They may provide it through salaried doctors or contract the delivery to independent physicians, who need to have relevant qualifications and a "practice right" to be eligible. The "practice right" is the right to

perform the professional activities, which can be sold and bought by another qualified physician. By establishing the territorial reach of the primary care districts and the number of practices in each of them, local governments can control the amount and type of care provided to the population. Patients can freely choose a family doctor and change him/her once a year. Doctors cannot refuse the patients who live in their primary care district, but are allowed to refuse patients from other districts.

A number of reforms have been enacted over the last decade to provide incentives to take up the posts of physicians and nurses. In order to increase the income of healthcare workers, the government implemented a total of 27% rise in the salary of specialist workers in 2012-2013, and a further growth of 65,5% will be achieved in 2016-2019 through a multi-step wage increase.. Although slightly higher than a decade ago, the number of practicing physicians (310 per 100 000 inhabitants in 2015), practising nurses (647 in 2015) and in particular general practitioners (34 in 2010) is still below the EU respective averages in the respective years (344, 833 and 78 per 100 000 inhabitants).

Although there is an official referral system and family doctors formally act as gatekeepers, the payment system includes no incentives to provide definitive care and avoid unnecessary referrals. Consequently, the number of referrals to specialists and hospitals is high. Only the 2007 reform (reducing inpatient capacity of hospitals by setting up a few regional universal hospitals and medical clinics, strengthening of the referral system and introducing a formal transparent system of waiting lists) has allowed the authorities to limit hospital overutilisation. Indeed, the number of acute hospital beds per 100000 inhabitants is, at 428, above the EU average of 402. It has fallen since 2005 (596). Inpatient discharges per 100 inhabitants fell from 24.9 in 2005 to 19.6 in 2015 (EU average: 16.2).

Responsibility for secondary and tertiary care is shared among different levels of local and regional government. Formally, the state (through the National Healthcare Service Center) owns large multi-speciality county hospitals providing secondary and tertiary inpatient and outpatient care to the acutely and chronically ill. However, municipalities and central government also play a

role, the former being responsible for polyclinics (outpatient specialist care), dispensaries (outpatient care for the chronically ill) and state-owned hospitals (secondary inpatient and outpatient care), while the latter own – through specific ministries – a number of acute and chronic hospitals. Dialysis and home care have in comparison a significant share of private ownership.

Treatment options, covered health services

Local authorities are required by law to provide services at a given level of care.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Family doctors can be employed according to four different schemes: (1) municipality employee paid on the basis of a monthly salary; (2) family doctor under a contract using public equipment and paid a capitation fee from the HIF; (3) family doctor being an independent provider with no municipal contract and no territorial supply obligation (large majority of the GPs); he/she is entitled to a capitation fee from the HIF only if he/she has minimum threshold of registered patients; (4) "freelance medical doctor", not being subject to public employee regulations, but not having a status of self-employed private entrepreneur either; he/she receives an out-of-pocket payment directly from the patient.

Capitation fees paid under schemes (2) and (3) are adjusted to the age structure of the patients covered: children and elderly weigh most, working age population least. Moreover, in order to avoid negative impact of the excessive practice size on the quality of care, a threshold of the number of patients is set above which the capitation payment is only partial.

The payment system in secondary and tertiary care depends on the type of institution and services provided. Outpatient specialist services are financed by fee-for-service points, whereby each procedure is assigned a number of points according to its complexity and requirement of services and providers report total monthly number of points to the HIF for reimbursement. The monetary value of a point is defined in advance, and part of the sub-budget is put aside at the beginning of each year to compensate for possible

'excessive' provision of services. The sustainability of outpatient budget is achieved by a so-called performance volume limit. In the beginning of each year, based on previous years' data, the performance volume limit is defined for every single outpatient health service provider. Performance volume limit for the year of 2014 was defined, in agreement with professional bodies. In 2018, 1 financing point equals to 1.98 HUF. Consequently, even if control mechanisms have been set in place, the fee-for-service payment scheme in hospitals could discourage treatment as an outpatient and encourage hospitals to treat as an inpatient for financial gain, rather than for the ideal treatment of the patient.

Inpatient services are reimbursed according to the DRG-based prospective payment system, except for a few high-cost interventions reimbursed on a case basis. State owned hospitals are paid by DRGs. In addition, there are income flows to hospitals for outpatient care, chronic care, laboratory care and wages. Hospitals report the total amount of completed procedures to the HIF which calculates their total value by multiplying the DRG points by the national base fee (value of one point) - set in advance for each year. The fiscal sustainability of financing inpatient care is also ensured by the performance volume limit. Currently one single weight-point equals 198 000 HUF. Chronic care is financed by a daily fee. Wages transfers are calculated by a monthly request of providers and it's financed by the National Institute of Health Insurance Fund Management.

The market for pharmaceutical products

Pharmaceutical spending accounts for 29.1% of total (public and private) current health expenditure and 22.2% of current public health care expenditure in 2015. Reimbursement is regulated while prices are (to some extent) freely determined by the market (even if decisions on reimbursement have impact on market operators' price policies). Prices of original drugs are established on the basis of external price referencing (comparison with the prices in the other EEA countries), while the maximum generics' prices are additionally linked to the original drug price. Reimbursement applies to two positive lists: one includes drugs which can be prescribed by any physician and are reimbursed at

either 0%, 25%, 55% or 80%; the other includes drugs with special indications, to be prescribed by specialists and reimbursed at either 50%, 70%, 90% or 100%. Moreover, physicians are obliged to prescribe reference medicines.

The 2010-2012 reform of the pharmaceutical market launched in the context of the state debt reduction aimed at rationalising medication use and strengthening competition for generic drugs. The decision was made to improve the efficiency of the pharmaceutical reimbursement system in order to meet the needs of patients. In practice, this also meant cuts in the pharmaceutical budget. A number of austerity measures were introduced in order to meet the budgetary constraints. In particular these measures are:

- modified legal provisions regulating payment obligations for the pharmaceutical companies,
- enhanced generic competition,
- requirements for enforcing patient compliance,
- revision of pharmaceutical treatment protocols,
- re-contracting of volume agreements, and the
- introduction of prescribing by active substance.

As a result of these measures, a substantial decrease in prices of pharmaceuticals in outpatient care could be realised during recent years, and public expenses could be decreased without increasing the (even sometimes with decreasing) financial burden on patients. At the same time, a number of new innovative drugs could be included in the reimbursement scheme.

E-Health, Electronic Health Record

In 2017 the Hungarian national eHealth platform (EESZT) was introduced with the aim of transforming the the paper-based or locally working healthcare system into a modern, service-focused nation-wide eHealth system which meets all the latest demands and requirements related to data security, information technologies and healthcare.

EESZT electronically stores information about the patients, connects all the Hungarian healthcare providers (such as hospitals, pharmacies, general practitioners) making it easier for physicians working in different institutions to access all important health information about the patient. Medical documents, related to all the treatments a patient has received, shall be sent to the system, building up a complete patient case history.

EESZT is integrated with existing systems, therefore clinicians, GPs and pharmacists can use their own health information systems (HIS). By using EESZT the physicians can rely on a detailed and comprehensive medical history of the patient, which allows for more precise medical decisions, greatly enhancing patient safety. On the other hand, the availability of previous diagnostic results greatly reduces the number of repeated diagnostic procedures.

The general public can also benefit from the developments through a specific portal: eeszt.gov.hu. Citizens are able to access all their medical records through the so-called “government gateway” or “Client Gate”, which is the official central electronic administration web service of the country. The portal allows citizens to view their medical record, electronic prescriptions, health care encounters etc. In order to protect sensitive medical data, the portal allows citizens to grant and restrict access to health professionals and to review the access log to their data.

New services and processes are continuously introduced in order to improve the system.. Standardisation of EHRs and improvement of interoperability will have a crucial impact on the cooperation between Hungarian health care providers. A centralised e-consultation and telemedicine framework and a centralised imaging database necessary for e-consultation are also among the goals to be achieved by the end of the EFOP project in 2020.

The central component of the Hungarian Electronic Health System is the e-prescription system. Its purpose is, on the one hand, to provide transparency and traceability and on the other hand, to avoid medicine abuse.

Health and health-system information and reporting mechanisms/ Use of Health Technology Assessments and cost-benefit analysis

Further measures to improve quality will include implementing a monitoring and evaluation system based on defined indicators. Major IT development plans include establishing a database for the insurance system, developing a personal identification system, improving remote diagnostics and telemedicine.

Healthy lifestyle and disease prevention activities have received a lot of attention mainly through programmes aiming at improving the health status and quality of life of the population. Total expenditure on prevention and public health services as 0.19% of GDP is below the EU average (0.25% in 2015) while public. Similarly, public expenditure on prevention and public health services as % total public current expenditure on health is in line with the EU average (2.3% vs. 3.2% in 2015).

Recently legislated and/or planned policy reform

To reduce shortages of medical staff, a comprehensive residency support programme was introduced in 2011 and was announced again for 2018. Beyond emigration, attrition puts further pressure on skills shortages. To address this challenge, wages of health professionals were increased substantially since 2012. Government implemented a total of 27% rise in the salary of specialist workers in 2012-2013, and a further growth of 65,5% will be achieved in 2016-2019 through a multi-step wage increase. However, they remain low in a European perspective.

For the further development of primary health care, the general practitioner's application for praxis purchase or resettlement was announced since 2015 yearly. In 2017 the amount of resettlement support was doubled and that the dentists could also apply. Candidates had to undertake to provide the care for at least 6 years after winning the tender.

Significant policy goals were achieved by reducing waiting lists and ensuring the diagnostic background of oncology care. For public-funded

CT/MRI diagnostic providers, it became mandatory by regulation to perform a diagnostic test for patients with a clinical suspicion of malignant neoplasm within 14 working days. To this end, a supplementary code outside the scope of Performance Volume Limit was introduced.

As a result of the Waiting List Reduction Program introduced in 2014, the number of patients waiting for surgery decreased by 15,910 between 2014 - 2017. According to the mandatory waiting list records of the institutions, 28,082 patients were waiting for surgical treatment on December 31, 2017 (compared with the 43 992 patients in 2014).

Efforts continue to improve the quality of financial management in the system. A support system has been developed taking into account quality and management considerations. This requires managers to adopt "active planning" to improve their liquidity situation, providing them with incentives to improve their performance rather than simply asking for an increase in central resources. As a result of these measures, hospital debt has been moderated. As of December 31, 2017, total liabilities of health care providers totaled HUF 51.9 billion, of which HUF 15.0 billion was overdue debt.

For the further improvement of the financing of healthcare providers and to create a balance within the professional and economic field as well, over the years of 2016-2017 the coverage available to health workers for wage increases was built into the performance financing instead of the direct transfer of wage elements.

As part of the EBP (Egészséges Budapest Program) program to renovate and reorganise the hospital sector there are plans to build three large central hospitals in Budapest, which represent the highest level of care, giving emergency care at 0-24 hours of the year 365 days. Beside them, the smaller co-hospitals are also undergoing major developments: most medical and IT developments, energy renovations start, and in many places new buildings or wings are built. Two of the new central hospitals are expected to complement already existing hospitals.

Challenges

The analysis above shows that a range of reforms have been implemented in recent years like for example to improve hospital efficiency and inpatient care supply or to promote the healthy life of the population in particular. Therefore, Hungary should continue to pursue them together with new challenging reforms. The main challenges for the Hungarian health care system are as follows:

- To improve the long-term sustainability of health insurance system, to avoid negative consequences for access and equity. This may mean improving the basis for more sustainable and larger financing of health care (e.g. considering additional sources of general budget funds), with a better balance between resources and demand, between the number of contributors and the number of beneficiaries and which can improve access and quality of care and its distribution between population groups and regional areas. If more resources are brought into the sector, it is important that they are pooled together through the strong pooling mechanisms in place today.
- To foster effective coordination mechanism between public entities responsible for investment decisions and providers actually using health care facilities.
- To continue efforts to strengthen care coordination, by promoting the role of GPs and avoiding unnecessary use of secondary and tertiary care. On one hand, supply of human resources to the primary care sector should be fostered by providing an adequate set of financial (performance-related component added to the current capitation-based remuneration) incentives. On the other hand, control and organisational measures strengthening the referral system should limit the use of specialist and hospital care.
- To develop the mechanism of updating the hospital payment system (relationship between the actual costs of treatments and tariffs become outdated). A sector-wide survey has been conducted recently in order to tackle this problem.

- To strengthen monitoring and control by modernising and developing information technologies as well as by supporting human resources involvement in the decision making process. To introduce effective mechanisms for assuring quality of care: clear definition of tasks and competences of the health care providers (especially in the area of emergency care), more stringent conditions for licensing and accreditation, consistent development and application of medical guidelines.
- To strengthen efforts to promote healthy lifestyles, in particular by preventing smoking, excessive alcohol consumption, unhealthy diet and physical activity. Public health has been underlined as a priority in the development of recent health strategy for the health system. In this framework, the public health programme should continue, the importance of medical screening should be stressed.

Table 2.13.1: Statistical Annex - Hungary

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	91	92	102	108	94	99	101	100	102	106	111	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	17.7	17.8	17.5	17.4	16.1	16.5	16.8	16.5	16.5	16.7	17.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	4.6	4.0	0.6	1.0	-6.5	0.9	2.0	-1.1	2.4	4.5	3.6	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	6.0	-4.8	3.6	-9.0	-2.0	3.0	-1.9	-0.4	2.9	8.7	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.3	8.4	8.0	8.2	8.0	7.7	7.8	7.7	7.5	7.4	7.8	10.2	10.1	10.1	10.2
Total current as % of GDP	7.1	8.1	7.8	8.0	7.8	7.6	7.6	7.5	7.3	7.1	7.2	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.9	0.6	0.2	0.3
Total per capita PPS	1,243	1,281	1,350	1,468	1,247	1,272	1,320	1,293	1,291	1,321	1,457	2,745	2,895	2,975	3,305
Public total as % of GDP	5.9	5.8	5.1	5.0	5.1	5.2	5.3	5.2	5.0	5.1	5.4	8.0	7.8	7.8	8.0
Public current as % of GDP	5.7	5.5	5.0	4.9	5.0	5.1	5.0	4.9	4.9	4.8	4.8	7.7	7.6	7.6	7.8
Public total per capita PPS	887	884	871	898	795	863	891	861	863	902	1,006	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.21	0.29	0.19	0.15	0.12	0.17	0.22	0.24	0.17	0.27	0.54	0.2	0.2	0.2	0.2
Public as % total expenditure on health	71.4	69.0	64.5	61.1	63.7	67.8	67.5	66.5	66.8	68.3	69.0	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	11.6	10.7	10.3	9.2	10.4	10.5	10.1	10.5	10.1	9.8	10.5	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	97.0	97.0	97.0	96.0	96.0	96.0	95.0	95.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	25.8	25.0	26.3	26.4	25.9	27.4	28.2	29.4	28.4	28.3	29.0	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	10.1	10.1	10.1	10.0	10.0	10.0	10.0	9.9	9.9	9.9	9.9	502.1	503.0	505.2	508.5
Life expectancy at birth for females	77.2	77.8	77.8	78.3	78.4	78.6	78.7	78.7	79.1	79.4	79.0	82.6	83.1	83.3	83.3
Life expectancy at birth for males	68.7	69.2	69.4	70.0	70.3	70.7	71.2	71.6	72.2	72.3	72.3	76.6	77.3	77.7	77.9
Healthy life years at birth females	54.3	57.2	57.8	58.2	58.2	58.6	59.1	60.5	60.1	60.8	60.1	62.0	62.1	61.5	63.3
Healthy life years at birth males	52.2	54.4	55.1	54.8	55.9	56.3	57.6	59.2	59.1	58.9	58.2	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	130	121	119	114	113	111	288	281	270	266	268	64	138	131	127
Infant mortality rate per 1 000 live births	6.2	5.7	5.9	5.6	5.1	5.3	4.9	4.9	5.0	4.5	4.2	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.2	2.1	2.0	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.8	1.8	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.8	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	2.6	2.6	2.4	2.3	2.5	2.5	2.7	2.4	2.2	2.2	2.1	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.42	0.41	0.39	0.38
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.9	1.8	1.7	1.7	1.6	1.6	1.6	1.7	1.7	1.7	1.8	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.6	1.6	1.2	1.1	1.2	1.4	1.5	1.2	1.1	1.1	1.1	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.14	0.32	0.30	0.28	0.26

Source: €OSTAT, OECD and WHO.

Table 2.13.2: Statistical Annex - continued – Hungary

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data					
	2009	2011	2013	2015													
Inpatient curative and rehabilitative care	30.3%	25.5%	25.0%	23.5%	24.0%	24.7%	24.3%	25.7%	26.5%	26.9%	26.8%	29.1%	27.9%	27.1%	27.0%		
Day cases curative and rehabilitative care	1.2%	0.9%	1.1%	1.1%	1.1%	1.2%	1.2%	1.9%	2.1%	2.0%	1.9%	1.7%	1.7%	3.0%	3.1%		
Out-patient curative and rehabilitative care	25.7%	22.2%	20.9%	19.3%	20.4%	22.8%	22.6%	22.9%	23.7%	23.2%	24.6%	26.8%	26.3%	23.7%	24.0%		
Pharmaceuticals and other medical non-durables	35.9%	31.4%	30.2%	28.9%	32.0%	33.2%	35.0%	32.5%	30.3%	30.1%	29.1%	13.1%	12.8%	14.7%	14.6%		
Therapeutic appliances and other medical durables	4.8%	4.3%	3.7%	3.6%	3.8%	2.6%	2.8%	2.7%	2.8%	2.9%	3.6%	3.6%	3.6%	4.1%	4.1%		
Prevention and public health services	5.2%	4.2%	4.0%	3.7%	4.3%	3.8%	3.4%	2.8%	2.7%	2.7%	2.6%	2.8%	2.5%	3.0%	3.1%		
Health administration and health insurance	1.3%	1.1%	1.2%	1.1%	1.1%	1.7%	1.6%	1.7%	1.8%	2.0%	2.1%	4.5%	4.3%	3.9%	3.8%		
Composition of public as % of public current health expenditure																	
Inpatient curative and rehabilitative care	32.6%	32.3%	34.3%	34.3%	32.7%	32.3%	32.1%	35.0%	35.4%	36.1%	36.4%	33.9%	33.6%	32.1%	31.9%		
Day cases curative and rehabilitative care	1.2%	1.2%	1.5%	1.6%	1.6%	1.6%	1.4%	2.4%	2.9%	2.7%	2.7%	1.9%	2.0%	3.4%	3.5%		
Out-patient curative and rehabilitative care	17.0%	16.6%	17.3%	17.9%	18.0%	17.8%	17.9%	17.9%	18.9%	18.4%	18.2%	22.9%	23.5%	22.2%	22.5%		
Pharmaceuticals and other medical non-durables	27.7%	28.9%	24.6%	23.5%	24.6%	27.6%	28.8%	24.6%	22.2%	22.1%	22.2%	11.8%	11.9%	12.6%	12.7%		
Therapeutic appliances and other medical durables	3.5%	3.6%	3.0%	3.3%	3.6%	2.0%	2.4%	2.2%	2.3%	2.3%	2.3%	1.8%	1.9%	2.0%	2.1%		
Prevention and public health services	4.2%	4.0%	4.0%	3.9%	3.8%	3.7%	3.2%	2.6%	2.5%	2.5%	2.3%	2.9%	2.5%	3.2%	3.2%		
Health administration and health insurance	1.4%	1.4%	1.6%	1.4%	1.4%	2.4%	2.2%	2.2%	2.3%	2.5%	2.9%	4.1%	4.0%	3.6%	3.4%		
Expenditure drivers (technology, life style)																	
MRI units per 100 000 inhabitants	0.26	0.26	0.28	0.28	0.28	0.30	0.30	0.28	0.30	0.31	0.36	1.0	1.4	1.5	1.9		
Angiography units per 100 000 inhabitants	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.9	0.9	0.9	1.0		
CTS per 100 000 inhabitants	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	2.1	1.9	2.1	2.3		
PET scanners per 100 000 inhabitants	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2		
Proportion of the population that is obese	:	:	:	20.0	20.0	:	:	:	:	20.6	:	15.0	15.1	15.5	15.4		
Proportion of the population that is a regular smoker	:	:	:	26.1	26.5	:	:	:	:	25.8	:	23.2	22.3	21.8	20.9		
Alcohol consumption litres per capita	12.9	13.2	12.6	11.6	11.5	10.8	11.5	11.3	10.9	10.9	:	10.4	10.3	10.1	10.2		
Providers																	
Practising physicians per 100 000 inhabitants	278	304	280	309	302	287	296	309	321	332	310	324	330	338	344		
Practising nurses per 100 000 inhabitants	595	620	595	615	621	621	621	632	643	641	647	837	835	825	833		
General practitioners per 100 000 inhabitants	:	:	:	:	35	34	:	:	:	:	:	77	78	78	78		
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402		
Outputs																	
Doctors consultations per capita	12.9	12.8	10.8	11.3	11.9	11.6	11.8	11.8	11.7	11.8	11.8	6.2	6.2	6.2	6.3		
Hospital inpatient discharges per 100 inhabitants	25	24	21	21	21	20	20	20	20	20	20	17	16	16	16		
Day cases discharges per 100 000 inhabitants	526	594	825	1,122	1,238	1,261	1,507	1,724	1,854	2,009	2,209	6,362	6,584	7,143	7,635		
Acute care bed occupancy rates	76.0	70.0	69.2	75.3	74.3	71.6	71.1	69.2	70.4	70.8	69.3	77.1	76.4	76.5	76.8		
Hospital average length of stay	6.5	6.3	9.0	9.2	9.2	9.5	9.5	9.6	9.3	9.4	9.5	8.0	7.8	7.7	7.6		
Day cases as % of all hospital discharges	2.2	2.5	4.0	5.4	5.6	5.9	6.9	8.0	8.5	9.1	9.9	28.0	29.1	30.9	32.3		
Population and Expenditure projections																	
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.				
AWG reference scenario	4.9	5.1	5.2	5.4	5.5	5.6	5.7	5.8	5.8	5.8	5.8	5.7	Hungary	EU			
AWG risk scenario	4.9	5.2	5.5	5.8	6.1	6.3	6.5	6.6	6.7	6.8	6.8	6.7	0.8	0.9			
Note: *Excluding expenditure on medical long-term care component.																1.8	1.6
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %				
Population projections until 2070 (millions)	9.8	9.8	9.7	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.9	Hungary	EU			
																-9.6	2.0

Source: €STAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.14. IRELAND

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

GDP per capita in PPS thousand is at €47.8 and far above EU average of €29.6 in 2015. Ireland has a population of 4.7 million inhabitants⁽¹⁸⁸⁾. It should be noted that in 2015 the GDP of Ireland grew by 25.1% from its 2014 level, which has a strong effect on some of the variables presented as a ratio of GDP in this country profile.

During the coming decades the population will steadily increase to 6 million inhabitants in 2070. Thus, Ireland is facing a considerable increase of its population by 29%, while the EU average population is estimated to increase by 2%.

Total and public expenditure on health as % of GDP

Total expenditure⁽¹⁸⁹⁾ on health as a percentage of GDP (8.2% in 2015) has fallen sharply from 2014, although this is due to the increase in GDP in that year rather than to an actual fall in health expenditure. It is below the EU average⁽¹⁹⁰⁾ of 10.2% in 2015. Public expenditure also fell from 7.1% of GDP in 2014 to 5.6% of GDP in 2015 versus the EU average of 8%. Looking at health care without long-term care⁽¹⁹¹⁾ reveals a similar picture with public spending being below but slightly further from the EU average (4.2% vs 6.8% in 2015).

To provide more context one can look at these variables in per capita terms. Total current spending on health at 4115 PPS in Ireland is above the EU average of 3305 in 2015. Similarly, public current spending on health care is, at 2849 PPS, higher than the EU average of 2609 PPS in 2015.

⁽¹⁸⁸⁾ This is according to Eurostat projections.

⁽¹⁸⁹⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽¹⁹⁰⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽¹⁹¹⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

Expenditure projections and fiscal sustainability

As a consequence of demographic changes, health care expenditure is projected to increase by 1.0 pps of GDP, above the average growth expected for the EU (0.9)⁽¹⁹²⁾, according to the Reference Scenario. When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.7 pps of GDP from now until 2070 (EU 1.6).

Ireland faces low fiscal sustainability risks in the short run and medium term, but risks are medium in the long term, risks, due to the significant projected increase in ageing costs including health care and long-term care⁽¹⁹³⁾.

Health status

Life expectancy at birth (83.4 years for women and 79.6 years for men in 2015) is close to the respective EU averages (83.3 and 77.9 years of life expectancy in 2015)⁽¹⁹⁴⁾. However, healthy life years, at 67.9 years for women and 66.6 years for men, were far above the EU averages of 63.3 and 62.6 in 2015. The infant mortality rate of 3.4 deaths per 1,000 live births is also slightly lower than the EU average of 3.6 deaths per 1,000 live births in 2015, having gradually fallen over most of the last decade (from 3.8% in 2005), although it has been relatively flat since 2006.

As for the lifestyle of the Irish population, data from the 2017 Healthy Ireland survey has shown that 22% of the Irish population aged 15 and over are regular smokers. In contrast, Eurostat reports a proportion of 19% for 2015. The 2017 Healthy Ireland survey also shows that 23% of the Irish population aged 15 and over are obese (Eurostat report 18.9%) while the survey also shows a reduction in alcohol consumption from 12.7 litres per capita in 2003 to 11 litres in 2015, but still above the EU average of 10.0 in 2012.

⁽¹⁹²⁾ The 2018 Ageing Report https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽¹⁹³⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽¹⁹⁴⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

System characteristics

Coverage

All persons ordinarily resident in the country are eligible, subject to certain charges, for all inpatient public hospital services in public wards including consultant services and out-patient public hospital services. Some groups are exempted from the charges (e.g. pregnant women, those suffering from certain medical conditions, medical card holders) and there is an annual cap of €800 for these charges. A medical card ensures free access to all general practitioner services, prescribed drugs ⁽¹⁹⁵⁾, emergency, inpatient, outpatient, certain dental aural ophthalmic and maternity care. Currently, 33% of the population are eligible for a medical card. In addition, persons with an income up to 50% above the income threshold for a medical card are eligible to receive free general practitioner services under the GP visit card scheme, which equates to an additional 10.4% of the population. Since Summer 2015, all children under 6 years of age (1 July 2015) and all persons 70 years and older (4 August 2015) are eligible for free general practitioner services. From 1 September 2018, all recipients of a Carer's Allowance (full and half-rate) or Carer's Benefit will be eligible for free General Practitioner Services. The remainder of the population is not entitled to free GP services ⁽¹⁹⁶⁾. Non-medical card holders are not covered for aural, ophthalmic and dental care and must also pay the first €34 each month towards prescribed pharmaceuticals; thereafter the public health system covers 100% of the cost.

Administrative organisation and revenue collection mechanism

In 2015, 69.3% of total health expenditure funding came from government sources (taxes at central level) and from the Health Contribution Levy (substituted by a new Universal Social Charge in 2011).

⁽¹⁹⁵⁾ A prescription charge of €2.50 per item in respect of items dispensed to medical card holders subject to a monthly cap of €25.00 per person or family.

⁽¹⁹⁶⁾ As a result, Ireland scores a bit above 5 on the scope of basic coverage (the third lowest OECD value) and a bit below 5 out of 6 on the depth of coverage according to the OECD scoreboard.

There has been an effort in recent years to reduce administrative costs and improve the general management of the sector. The Health Service Executive (HSE) was established under the Health Act 2004 as the single body with statutory responsibility for the management and delivery of health and personal social services in the Republic of Ireland. As outlined in the Health Act 2004 the objective of the Executive is to use the resources available to it in the most beneficial, effective and efficient manner to improve, promote and protect the health and welfare of the public.

As regards the funding of the HSE and the Department of Health, the budget is determined by the Parliament (Oireachtas). Each year the Parliament votes public monies to fund the Department of Health and services provided by or on behalf of the HSE. Since the start of 2015 the HSE no longer has a separate Vote and its spending and funding are accounted for as part of the Health Vote. The HSE submits its National Service Plan for the Minister of Health's approval, setting out the type and volume of health and social care services to be provided by the HSE that year. The HSE is required to operate within the limits of its allocation, delivering the levels of service which are provided for in the Plan. During the course of the year, detailed information related to performance of the health service in relation to Access to and Integration of services, the Quality and Safety of those services, Finance, Governance and Compliance, and Workforce are provided to the Department of Health by way of monthly Performance Monitoring Reports against the Plan..

Role of private insurance and out of pocket co-payments

In recent years, private expenditure as a percentage of total health expenditure has increased (from a trough of 23.3% in 2003 to 30.7% in 2015) and is above the EU average (21.6% in 2015).

Note also that more than 40% of the private expenditure is voluntary community-rated health insurance ⁽¹⁹⁷⁾ (which 45.8% of the population takes up) to help cover for a) cost-sharing (complementary insurance) when not eligible for a

⁽¹⁹⁷⁾ See for instance McDaid D, Wiley M, Maresso A and Mossialos E. Ireland: Health system review, Health Systems in Transition, 2009; 11(4): 1 – 268.

medical card, b) the services and goods excluded from the benefit basket (supplementary) and c) the same goods and services as the primary coverage (duplicative) ⁽¹⁹⁸⁾. It would be important that this type of insurance does not discourage the recourse to the most cost-effective services (e.g. more primary care than specialist care or hospital care when the latter are unnecessary).

Out-of-pocket payments are about 15.2% of all health-expenditure and have decreased since their highest value of 18.2 in 2010.

Types of providers, referral systems and patient choice

The public health service is a mix of public and private provision. Primary care is delivered in public health centres and private premises of general practitioners (GPs). In recent years, Primary Care Centres have been developed within which both GPs and a range of primary care professionals employed by the HSE are housed. Outpatient specialist care is delivered in hospital outpatient departments. Approximately 85% of acute care beds are within the public hospital system. Persons may also decide to access services in the private hospital sector and in most such cases patients use private health insurance to meet the costs involved.

The number of licensed physicians per 100 000 inhabitants in Ireland is, at 288, below the EU average of 344 in 2015, below the 2010 peak of 308 (before which it had been steadily increasing). The number of general practitioners (GPs) per 100 000 inhabitants was 75 in 2015, below the EU average of 78.3. The number of nurses per 100 000 inhabitants (1240 in 2013) is far above the EU average of 825.

Medical card and GP Visit card holders are free to select any GP participating in the General Medical Services (GMS) Scheme but must continue to use this GP subject to applying to and getting approval from the Health Service Executive (HSE) for a change of GP under the GMS Scheme. The remainder of the population make their own

⁽¹⁹⁸⁾In addition, in 2002 the Government established the National Treatment Purchase Fund to pay for the treatment in the private hospital sector of patients deemed to have been waiting for too long for surgery in the public hospital system.

arrangements to access primary care physicians but must pay the full private fee for this service. Access to specialist medical services in acute hospitals is available only on foot of a referral by a primary care physician. The delivery of specialist medical care and care utilisation is strongly centred on hospitals where most specialists work ⁽¹⁹⁹⁾. Authorities have planned the greater use of ICT and a standard approach to the use of electronic health information, which can help in implementing more effective referral systems and care coordination and as a consequence improve effectiveness and efficiency of care (see below for more details).

In 2014 the number of acute care beds per 100 000 inhabitants was 243, compared to an EU average of 402. The number has decreased since 2003, but has been relatively flat since 2011.

Inpatient hospital discharges per 100 inhabitants in 2014 were, at 13.7, below the EU average of 16.2. There were 20,8 day case discharges per 100 inhabitants in 2014, far above the EU average of 16.4. As a result, the ratio of day cases to longer stays is amongst the highest in Europe.

Acute care bed occupancy rates in 2015 were 94.7%, far above the EU average of 76.8%. The rates have been increasing since a value of 85% in 2003.

Average length of stay has fallen slightly from a peak of 7,7 in 2008 to 6.4 days in 2015, below the EU average of 7.6.

It should be noted that hospital bed data for Ireland excludes private hospitals, and is therefore under-reported compared with other countries. This also applies to hospital discharge data and may contribute to explain the extremely high bed occupancy rates as well as the low levels of discharges.

There is a Common Basket of services of the public health system that has to be delivered to the whole population covered.

⁽¹⁹⁹⁾Indeed, according to the OECD, the level of choice has a score of a bit more than 4 out of 6, while gatekeeping scores 2 out of 6.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

GPs are paid on a capitation (per number of registered patients) basis plus a fee-per-item basis for specified services (e.g. immunisations) for medical card and GP visit card patients (i.e. 44% of the population as of April 2017) ⁽²⁰⁰⁾⁽²⁰¹⁾. Heretofore, there has been limited room to use performance-related payments to encourage health promotion, chronic disease prevention or disease management actions. However, in 2015, a package of measures was introduced, including terms for the delivery of GP care without fees for all children under 6 years and the provision of GP care without fees to all persons aged 70 years and over. These represent the first phase in the delivery of a universal GP service. The new enhanced under-6 service involves age-based preventive checks focused on health and wellbeing and the prevention of disease and also covers an agreed cycle of care for children under 6 diagnosed with asthma.

A Diabetes Cycle of Care for adult Medical Card and GP Visit Card patients who have Type 2 Diabetes was also introduced in 2015.

Historically, specialists have been permitted to engage in private fee-for-service practice in conjunction with the receipt of salary as public hospital employees. This dual practice in conjunction with the presence of duplicative private insurance (private insurance that covers the same goods and services as the primary coverage) risked inducing specialists to devote an excessive proportion of their time to private practice, with consequent negative effects of the service for public patients. In an attempt to mitigate the problem, in 2008 authorities negotiated a new employment contract for specialists, granting that a proportion of consultants will not have any fees from private practice while those who engage in private practice are obliged to have a minimum of 80% public patients workload ⁽²⁰²⁾.

⁽²⁰⁰⁾ The remaining 56% of the population must pay GPs on a private fee per visit basis.

⁽²⁰¹⁾ The OECD score for remuneration incentives to raise the volume of care is 3 out of 6 for Ireland as a result of this mix of fee-for-service, salary and capitation systems.

⁽²⁰²⁾ Monitoring arrangements based upon measurement of activity and case-mix have been introduced.

Public remuneration of doctors is determined by the central government and following the severe economic crisis national authorities have focused on controlling wages in the health sector.

Hospitals are paid or funded using a combination of prospective global budgets and activity-related/DRG payment. Efforts continue to improve cost transparency and efficiency in the sector.

The introduction of an activity-based funding mechanism is a key health reform initiative. In May 2015, the authorities published an action plan for 2015-2017 to implement activity-based funding in public hospitals. The actual transition from block-funding of hospital activities is a gradual process that commenced in January 2016 and will extend over several years, starting with inpatient and day-cases before widening to outpatient care. In the longer term, the programme will consider implementation of activity-based funding in other areas such as emergency, community and home care. Activity-based funding is meant to improve quality, transparency, data collection and the allocation of resources across hospitals. It is important to note that while the new funding model will encourage hospitals to use resources at their disposal more efficiently within their overall budgetary ceilings, activity-based funding does not seek to reduce current expenditure on acute hospital services. Implementation of the forthcoming stages could prove challenging in the absence of a complete system of patient identifiers and fully reformed financial management systems. A new Healthcare Pricing Office (HPO) was established on an administrative basis in January 2014 to set the national DRG ⁽²⁰³⁾ prices on which the activity-based funding system is based and to manage the HIPE ⁽²⁰⁴⁾ dataset.

The market for pharmaceutical products

The initial price of all reimbursable medicines is based on clinical performance, economic evaluation, the cost of existing medicines and international prices (currently based on the average manufacturing price in AT, BE, DK, ES, FI, FR,

⁽²⁰³⁾ Diagnosis-Related Groups (or DRGs) are a classification which groups hospital case types that are clinically similar and are expected to have a similar hospital resource usage.

⁽²⁰⁴⁾ HIPE (Hospital Inpatient Enquiry) is the principal source of national data on discharges from acute hospitals in Ireland.

GR, DE, IT, LU, NL, PT, SE and UK, in line with current agreement with industry). Discounts and rebates plus price freezes and cuts are measures to control expenditure directly. The authorities, through the Health Service Executive have established a Medicines Management Programme. A key focus of the programme is on cost-effective prescribing and the reduction in drug expenditure through more rational prescribing.

Public pharmaceutical spending as a proportion of public current health spending was 13.8% in 2015, above the EU average of 12.7%. It should be noted that, given the large increase of GDP in 2015 this probably underestimates the difference in pharmaceutical expenditure.

The ESRI report "Pharmaceutical Prices, Prescribing Practices and Usage of Generics in a Comparative Context" was published in 2013 and showed that prices for originator in-patent medicines and generic medicines were higher in Ireland compared to other EU Member States.

Several policies have been implemented to reduce the price of pharmaceuticals and details of the main policy initiatives are as follows:

- **Agreement with Industry.** The authorities have entered into a series of price reduction agreements with both the Irish Pharmaceutical Healthcare Association (IPHA) and the Association of Pharmaceutical Manufacturers in Ireland (APMI). Taking these Agreements together, it is estimated that cumulative savings in excess of €1.5 billion have been generated between 2006 and 2014. Successor agreements are expected to be introduced in 2016.
- **Generic Substitution and Reference Pricing.** The impact of this legislation has been positive in terms of increasing the level of generic penetration in the Irish market. A target for generic penetration of the off-patent market by volume of 70% by end 2016 has been exceeded. At the end of 2017, generics accounted for 74% of the total off-patent market by volume and 42% by value.
- **Reference pricing.** This involves setting a common reimbursement amount for designated interchangeable groups of medicines, has

delivered savings in the region of €50 million in 2014 and a further €25 million in 2015.

Health and health-system information and reporting mechanisms/ Use of Health Technology Assessments and cost-benefit analysis

The Health Information and Quality Authority (Incorporating the Office of the Chief Inspector of Social Services) was established in mid-2007. It has a broad range of functions which include the setting and monitoring of service standards and health technology assessment. The Chief Inspector of Social Services currently registers regulates residential services for older people, regulates residential and residential respite services for children and adults with disabilities and inspects children's residential centres, special care units and foster care settings.

Future plans to develop HIQA's role include extending the Authority's remit for standard setting to private hospitals, overseeing a licensing system for public and private healthcare providers and to continue undertaking Health Technology Assessments in priority areas to support investment and disinvestment decisions.

The National Clinical Effectiveness Committee (NCEC) is a Ministerial committee established in 2010. It provides oversight for the National Framework for Clinical Effectiveness. Its terms of reference are to prioritise and quality assure to the level of international methodological standards a suite of National Clinical Guidelines and National Clinical Audit, prioritised, as significant for the Irish healthcare system. Each guideline has a full budget impact assessment and Health Technology Assessment if required.

A policy mandate for guideline implementation is provided through Ministerial endorsement.

Relevant Key Performance Indicators and audit are identified for each guideline to track and monitor implementation through the HSE Performance Assurance Reports, compliance with HIQAs *National Standards for Safer Better Healthcare*. It is intended that increased alignment with the clinical indemnity scheme and plans for licensing of hospitals will further strengthen the mandate for guideline implementation.

E-Health, Electronic Health Record

An *eHealth – Strategy for Ireland* was published in December 2013. eHealth Ireland and the role of the Chief Information Officer were established in 2014 and are responsible for implementing the eHealth strategy and driving eHealth initiatives. The development of a national Electronic Health Record (E.H.R.), along with the development of the Individual Health Identifier (I.H.I) are essential elements to ensure that patient data can be securely connected and shared within the health service, providing safer, better care to patients. The technical implementation of the IHI has commenced with a roll-out for the integration of the identifier into various ICT systems nationally on a phased basis across acute and primary health services. The national EHR Strategic Business Case published in 2016 sets out the rationale and investment required for the development of and implementation of a national E.H.R and work is ongoing in progressing the three core elements of the programme: (i) acute EHR, (ii) Community Operational Systems and (iii) a Shared Care Record supported by an integration capability to share data across the various health domains.

In addition to the I.H.I. and E.H.R. other national ICT systems are being introduced or standardised. The Maternal and New-born system (MN-CMS) continues to be deployed nationally on a phased basis while other systems such as the national laboratory system (MedLIS), the national oncology management system (MOCIS), eReferrals and ePrescribing continue to be progressed.

Recently legislated and/or planned policy reforms

Legislation was introduced in 2013 to provide for the charging of all private in-patients in public hospitals.

The Nursing Homes Support Scheme (NHSS), often referred to as the “Fair Deal” is a scheme of financial support for people who require long-term nursing home care. The statutory based scheme commenced on the 27th October 2009 with the enactment of the Nursing Homes Support Scheme Act 2009 and replaced the former Nursing Home Subvention scheme which had been in existence since 1993. The NHSS is operated by the HSE. This Scheme was reviewed and a report of the

Review was published in 2015. Work is underway in implementing the recommendations contained in the Review.

In June 2016, the All-Party Committee on the Future of Healthcare was established with the goal of developing a consensus on the future direction of healthcare policy in Ireland. The Committee consulted with a broad range of stakeholders and published the Sláintecare Report in May 2017. The report presents a ten-year vision for a health service where the majority of care is delivered in the community, care is integrated across different services and access is based on need and not ability to pay. The report details key reforms needed to move towards that vision.

The Government gave approval for the Department of Health to advance key actions in the Sláintecare Report and to develop a full response to the report. Among these actions, was the establishment of an independent group to examine the effects of removing private practice from public hospitals. This group is expected to report by the end of 2018.

A new implementation and governance structure has been put in place to drive reform. A dedicated Sláintecare Programme Office has been established and a new Executive Director recruited. The Chair of the new Sláintecare Advisory Council was appointed in July 2018. The council will provide both Irish and international health expertise to support the work of the Sláintecare Programme Office.

In August 2018, the Sláintecare Implementation Strategy was published following approval by government. This is the Government’s ten-year strategy to reform Ireland’s health and social care services. The strategy provides a framework for reform with four over-arching goals, and 10 strategic actions.

An Independent Review Group has been established to examine and enquire into the effects of the removal of private activity from public hospitals and examine potential benefits and potential adverse consequences, including any unintended consequences that may arise in the removal.

The Department of Health is committed to evolving the current health structures, in line with other reforms, in order to devolve decision-making and autonomy in line with demonstrated functionality, as outlined in the Sláintecare Implementation Strategy.

The Irish National Dementia Strategy was launched in December 2014. The Strategy aims to improve dementia care to allow people with dementia to live well for as long as possible and have services and supports delivered as well as possible. A National Dementia Office was established in the HSE in 2015 to drive the Strategy's implementation. A mid-term review of the Strategy (May 2018) noted that good progress has been made on implementing many of the Strategy's 35 priority and additional actions but that additional financial and staffing resources will be required in the areas of diagnosis, post-diagnostic supports, primary care, acute care, home care and housing if the Strategy is to be fully implemented.

The introduction of activity-based funding and a Healthcare Pricing Office described under "Price of healthcare services, purchasing, contracting and remuneration mechanisms" above will help to deliver greater efficiency and transparency in the delivery of services and therefore will enhance the fiscal sustainability of the health system.

The Department of Health conducts an annual data collection of the private hospital sector. This is an important step in closing current data gaps, and allows statistics for Ireland to be viewed in a more comparable way with other Member States.

The Department of Health launched a public consultation on a new Health Information Policy Framework in late 2017 with a view to finalising the policy in early 2019.

The National Development Plan provides €10.9 billion, over the ten year period, for a number of major capital investment projects and programmes along with significant reform initiatives for the health sector including new healthcare facilities that allow for implementation of new models of care, for the delivery of services in high quality modern facilities and expanded bed numbers and health services to build a better health service for

the future consistent with the National Planning Framework.

The Health Service Capacity Review was published in January 2018. The Review forecasts future capacity requirements in acute hospitals, primary care and in services for older persons (residential and homecare services) for the period 2016 to 2031. The analysis took account of current levels of demand and capacity, demographic and non-demographic factors that will drive future demand, and the potential impact that key system reforms can have on capacity needs.

The analysis of the Capacity Review informed the investment commitments in the National Development Plan. Arising from the findings of the Capacity Review, the Government committed to funding an extra 2,600 acute hospital beds, 4,500 residential care beds and three new elective-only hospitals in major population centres. This commitment is part of a broader programme of reform in the health sector. Investment and reform will go hand in hand, in order to drive change in the delivery of health and social care services in Ireland ⁽²⁰⁵⁾.

Challenges

- To consider changes in payment procedures to physicians (e.g. through the use of mixed payment schemes) to encourage health promotion, disease prevention and disease management activities in primary care and make primary care more attractive; To implement measures to prevent chronic diseases and their complications.
- To continue to enhance primary care provision by increasing the numbers and spatial distribution of primary care professionals and ensuring an effective referral system from primary to specialist care and from specialist to

⁽²⁰⁵⁾ Project Ireland 2040 is the overarching policy and planning framework for the social, economic and cultural development of Ireland. It includes both the 20-year National Planning Framework and the detailed capital investment plan for the period 2018 to 2027, the National Development Plan. The Framework outlines the broad policy principles and priorities to plan for future population and economic growth in Ireland over the next 20 years. The principles of the Planning Framework will be underpinned by the National Development Plan, a ten-year, €16 billion capital investment programme.

primary care. This could improve access to care by different population groups and reduce unnecessary use of hospital care and therefore overall costs. A related challenge in streamlining patient care is the introduction of individual patient identifiers which is being addressed. These improvements could be complemented with incentives for patients, both financial and non-financial, to encourage the use of primary care versus specialist care.

- To reduce unnecessary use of specialist and hospital care and within hospitals, ensuring that care is provided in the most clinically appropriate and cost-effective way, for example by maximising the proportion of elective care provided on a day case basis, day-of-surgery admission and reducing inappropriate lengths of stay.
- To explore the means to improve the way private and public provision are better integrated in an overall provision framework and reconsider the current system of payment incentives which may be detrimental to public patients and the public sector.
- To consider additional measures regarding direct pharmaceutical expenditure control, product reimbursement on the basis of cost-effectiveness information and greater use of generics vs. branded medicines.
- To continue to enhance managerial accountability and decrease administrative costs while aligning incentives (payments, cost-sharing) with national public health goals and effectiveness and efficiency. The efforts in setting up activity-based costing should help improve quality, transparency, data collection and a reallocation of resources across hospitals, and in time the wider health care system.
- To improve data collection in some crucial areas such as resources and care utilisation. Better monitoring of activity in the sector, combined with greater use of health technology assessment could be used for planning purposes and for defining the extent of cost-sharing. The work to develop IHIs should be a key plank of future developments.
- To further enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, obesity).

Table 2.14.1: Statistical Annex - Ireland

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP, in billion Euro, current prices	170	185	197	188	170	168	172	176	180	195	262	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	32.7	33.8	35.1	32.1	30.6	33.1	34.2	34.5	34.5	37.1	47.8	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	3.6	2.8	2.1	-6.0	-5.5	1.3	2.6	-0.2	1.4	8.0	24.8	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	-0.2	7.9	8.7	8.1	1.1	-2.4	4.1	2.6	2.6	-1.9	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.0	7.8	8.2	9.5	10.9	10.9	10.4	10.8	10.9	10.4	8.2	10.2	10.1	10.1	10.2
Total current as % of GDP	6.7	7.0	7.2	7.6	7.5	7.8	9.1	10.5	10.4	9.9	7.8	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.4	0.8	1.0	1.9	3.4	3.1	1.3	0.3	0.5	0.5	0.4	0.9	0.6	0.2	0.3
Total per capita PPS	2,997	3,089	3,374	3,618	3,696	3,613	3,509	3,721	3,849	3,920	4,115	2,745	2,895	2,975	3,305
Public total as % of GDP	6.3	6.1	6.5	7.5	8.3	8.3	7.8	7.9	7.5	7.1	5.6	8.0	7.8	7.8	8.0
Public current as % of GDP	6.0	5.8	6.2	7.2	8.1	8.0	7.5	7.6	7.3	6.9	5.4	7.7	7.6	7.6	7.8
Public total per capita PPS	2,358	2,399	2,643	2,845	2,827	2,748	2,638	2,728	2,639	2,693	2,849	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.29	0.21	0.28	0.28	0.24	0.25	0.24	0.29	0.21	0.26	0.22	0.2	0.2	0.2	0.2
Public as % total expenditure on health	78.7	77.7	78.3	78.6	76.5	76.0	75.2	73.3	68.6	68.7	69.3	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	21.4	21.8	20.5	18.2	16.9	13.0	18.3	19.3	20.1	19.6	18.9	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	16.0	16.1	14.8	15.3	16.1	18.2	17.7	11.4	15.0	15.4	15.2	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	4.1	4.2	4.3	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	502.1	503.0	505.2	508.5
Life expectancy at birth for females	81.3	81.7	82.1	82.4	82.7	83.1	83.0	83.1	83.1	83.5	83.4	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	76.9	77.3	77.9	77.8	78.5	78.6	78.7	79.0	79.3	79.6	76.6	77.3	77.7	77.9
Healthy life years at birth females	64.0	64.9	65.6	65.1	65.2	66.9	68.3	68.5	68.0	67.5	67.9	62.0	62.1	61.5	63.3
Healthy life years at birth males	62.9	63.2	62.9	63.5	63.9	65.9	66.1	65.9	65.8	66.3	66.6	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	59	57	53	55	50	48	126	122	117	112	111	64	138	131	127
Infant mortality rate per 1 000 live births	3.8	3.9	3.2	3.4	3.3	3.6	3.5	3.5	3.5	3.3	3.4	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	2.5	2.4	1.9	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	0.7	0.7	0.5	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	2.1	1.9	1.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.2	1.2	1.3	1.5	1.6	1.6	1.4	1.4	1.5	1.4	1.0	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.0	0.0	0.1	0.3	0.3	0.4	0.4
Prevention and public health services	:	:	:	:	:	:	:	:	0.3	0.3	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	:	:	:	:	:	:	:	:	0.3	0.4	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	1.7	1.6	1.3	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	0.4	0.4	0.3	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	1.4	1.3	1.0	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.8	0.9	0.9	1.1	1.2	1.2	1.1	1.1	1.1	1.0	0.8	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	:	:	:	0.2	0.2	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	:	:	:	:	:	:	:	:	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.14.2: Statistical Annex - continued – Ireland

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data				
	2009	2011	2013	2015												
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	23.5%	23.8%	24.2%	29.1%	27.9%	27.1%	27.0%	
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	6.7%	6.8%	6.7%	1.7%	1.7%	3.0%	3.1%	
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	20.0%	19.3%	19.6%	26.8%	26.3%	23.7%	24.0%	
Pharmaceuticals and other medical non-durables	17.7%	17.6%	17.7%	19.0%	21.2%	20.0%	15.7%	13.5%	14.5%	14.0%	13.0%	13.1%	12.8%	14.7%	14.6%	
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.4%	0.4%	1.2%	3.6%	3.6%	4.1%	4.1%	
Prevention and public health services	:	:	:	:	:	:	:	:	2.8%	2.7%	2.7%	2.8%	2.5%	3.0%	3.1%	
Health administration and health insurance	:	:	:	:	:	:	:	:	3.1%	3.5%	2.8%	4.5%	4.3%	3.9%	3.8%	
Composition of public as % of public current health expenditure																
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	22.8%	23.6%	23.6%	33.9%	33.6%	32.1%	31.9%	
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	5.9%	6.1%	6.1%	1.9%	2.0%	3.4%	3.5%	
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	19.6%	18.8%	19.2%	22.9%	23.5%	22.2%	22.5%	
Pharmaceuticals and other medical non-durables	13.8%	15.3%	15.1%	15.1%	15.0%	15.1%	14.8%	14.5%	14.7%	14.1%	13.8%	11.8%	11.9%	12.6%	12.7%	
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.4%	0.3%	0.4%	1.8%	1.9%	2.0%	2.1%	
Prevention and public health services	3.3%	3.4%	3.2%	2.8%	2.5%	:	:	:	2.5%	2.3%	2.4%	2.9%	2.5%	3.2%	3.2%	
Health administration and health insurance	:	:	:	:	:	:	:	:	1.2%	1.2%	1.1%	4.1%	4.0%	3.6%	3.4%	
Expenditure drivers (technology, life style)																
MRI units per 100 000 inhabitants	:	0.80	0.85	0.90	1.19	1.24	1.31	1.24	1.33	1.34	1.41	1.0	1.4	1.5	1.9	
Angiography units per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0	
CTS per 100 000 inhabitants	1.1	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.7	1.8	2.1	1.9	2.1	2.3	
PET scanners per 100 000 inhabitants	:	:	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	
Proportion of the population that is obese	:	:	15.0	:	:	:	:	:	:	18.2	18.0	15.0	15.1	15.5	15.4	
Proportion of the population that is a regular smoker	:	:	29.0	27.0	:	:	:	:	:	12.7	19.0	23.2	22.3	21.8	20.9	
Alcohol consumption litres per capita	13.3	13.4	13.6	12.7	11.4	11.9	11.7	11.5	10.5	10.8	:	10.4	10.3	10.1	10.2	
Providers																
Practising physicians per 100 000 inhabitants	:	272	280	290	301	308	267	271	269	281	288	324	330	338	344	
Practising nurses per 100 000 inhabitants	1236	1274	1296	1288	1274	1294	1261	1260	1240	:	:	837	835	825	833	
General practitioners per 100 000 inhabitants	51	51	53	53	55	56	72	72	73	78	75	77	78	78	78	
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402	
Outputs																
Doctors consultations per capita	:	:	3.3	:	:	3.8	:	:	:	:	5.7	6.2	6.2	6.2	6.3	
Hospital inpatient discharges per 100 inhabitants	14	14	14	14	13	13	13	14	14	14	:	17	16	16	16	
Day cases discharges per 100 000 inhabitants	10,667	15,542	16,500	17,425	18,404	18,998	19,311	20,016	20,270	20,809	:	6,362	6,584	7,143	7,635	
Acute care bed occupancy rates	86.0	87.0	87.1	88.8	89.2	91.4	91.9	92.6	93.8	93.3	94.7	77.1	76.4	76.5	76.8	
Hospital average length of stay	6.5	6.3	7.4	7.7	6.7	6.6	6.4	6.2	6.0	6.0	6.4	8.0	7.8	7.7	7.6	
Day cases as % of all hospital discharges	44.0	53.2	54.6	56.3	58.1	59.3	60.0	59.4	60.0	60.3	:	28.0	29.1	30.9	32.3	
Population and Expenditure projections													Change 2016-2070, in pps.			
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Ireland	EU		
AWG reference scenario	4.1	4.3	4.4	4.6	4.8	4.9	5.0	5.1	5.1	5.2	5.2	5.1	1.0	0.9		
AWG risk scenario	4.1	4.4	4.6	4.9	5.2	5.4	5.5	5.6	5.7	5.8	5.8	5.8	1.7	1.6		
Note: *Excluding expenditure on medical long-term care component.													Change 2016-2070, in %			
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Ireland	EU		
Population projections until 2070 (millions)	4.7	4.9	5.0	5.1	5.3	5.4	5.5	5.7	5.8	5.9	6.0	6.0	29.4	2.0		

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.15. ITALY

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

GDP per capita, 26,077 PPS in 2015, is slightly under the EU average for the same year (29,610 PPS) slightly up from 25,300 in 2014. Population, recorded at 60.8 million in 2015, is projected to decrease to 54.9 million in 2070, which at -9.6% represents a growth rate that is more than 11 pps lower than the average for the EU (2.0 % over the same period).

Total and public expenditure on health as % of GDP, per capita PPP, public expenditure as % of total government expenditure. Recent trends and vs. EU average

Total (public plus private) expenditure on health as a percentage of GDP (9.3% in 2015) is below the EU average ⁽²⁰⁶⁾ (10.2% in the same year). It has increased from 8.7% in 2005. Public expenditure on health as a percentage of GDP is also slightly below the EU average (7.0% vs. 8.0 % in 2015), up from 6.8% in 2005. Total (2,495 PPS) and public (1,887 PPS in 2015) per capita expenditure were below the EU average (3,305 PPS and 2,609 PPS in 2015), having increased since 2005 (2,219 PPS and 1,732 PPS), but with moderate changes in the second part of the decade. Looking at health care without long-term care ⁽²⁰⁷⁾ reveals a similar picture, with spending below the EU average but with a smaller gap (6.3% vs 6.8% in 2015).

The significant slowdown of the increase in the public health care expenditure has been achieved due to the governance regulations and procedures implemented in the last years, namely the Health Pact between State and Regions, the monitoring of the fulfilment of the budget objectives and the activation of the Deficit Reduction Plan procedure for those regions not complying with the agreed budget rules. As a result, public health care expenditure has grown by an annual average of

⁽²⁰⁶⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units or units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽²⁰⁷⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

0.9% in nominal terms over the period 2007-2016, against the 7.1% of the period 2000-2006 ⁽²⁰⁸⁾.

Expenditure projections and fiscal sustainability

As a result of ageing, health care expenditure is projected to increase by 0.7 pps of GDP until 2070 (below the average change in the EU of 0.9 pps) ⁽²⁰⁹⁾. When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.1 pps of GDP from now until 2070 (EU: 1.6).

Medium and long term sustainability risks, which are classified as high for Italy, mainly derive from the high debt-to-GDP ratio and are only partly linked to health care expenditure and the projected cost of ageing ⁽²¹⁰⁾.

Health status and disability (life expectancy, healthy life years, mortality, infant mortality)

Life expectancy at birth (84.9 years for women and 80.3 years for men in 2015) is above the EU average (83.3 and 77.9 years in 2015). Healthy life years at birth for women and for men (62.7 and 62.6 respectively in 2015) are very close to the EU average for the same year (63.3 for females and 62.6 for males).

System characteristics

System financing: taxed-based or insurance-based

A regionally based National Health Service (NHS), with a division of responsibilities between the central government and the regional governments (set by the 2001 Constitutional

⁽²⁰⁸⁾ Ministero dell'economia e delle finanze – RGS (2017), Il monitoraggio del sistema sanitario, Report no.4. <http://www.rgs.mef.gov.it/Documenti/VERSIONE-I/Attivit-i/Spesa-soci/Attivit-monitoraggio-RGS/2017/IMDSS-RS2017.pdf>.

⁽²⁰⁹⁾ I.e. considering the "reference scenario" of the projections (see the 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en).

⁽²¹⁰⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

Amendment), and funded mainly by taxation, provides full coverage of resident population ⁽²¹¹⁾.

Starting from 2013, a new mechanism has been set for the distribution of financial resources among regions, according to the procedure envisaged in legislative decree 68/2011, which may be summarised as follows:

1. each year, the total amount of resources addressed to the financing of health system (according to the evolution of macroeconomic variables and budget constraint) is defined (so called "fabbisogno nazionale standard");
2. five benchmark regions are identified, among regions which: a) have guaranteed the delivery of health services efficiently and appropriately ensuring, at the same time, a budget balance position; b) have fulfilled the achievements ("Adempimenti") foreseen by law, according to the assessment of the relevant Committee (so-called "Tavolo degli Adempimenti"); c) have reached a high score in health quality ranking, according to the set of indicators envisaged in the Health Pact;
3. three regions out of the 5 benchmark ones are selected by the Conference of regions, being fixed the top ranked region;
4. the average regional standard costs are computed on the basis of the actual costs of the three reference regions;
5. standard costs are applied to the regional population, weighted with regional age structure;
6. the resulting distribution is applied to the *fabbisogno nazionale standard*, obtaining the *fabbisogno sanitario* of each region ("*fabbisogno regionale standard*").

The financial coverage of the regional *fabbisogno sanitario* is guaranteed through a mix of financial resources:

1. the regional tax on production activities (IRAP);
2. the surcharge on personal income tax;
3. revenues of the ASL/AO (Local Health Bodies/Hospital Bodies - *Aziende Sanitarie Locali/Aziende Ospedaliere*) from either sale of services or fees paid by citizens (so-called "tickets");
4. as for Regions with ordinary institutional status (*regioni a statuto ordinario*), a share of VAT revenue is granted to cover the difference between their *fabbisogno sanitario* and the resources obtained through the financial channels under points a)-c);
5. as for Regions with special institutional status (*regioni a statuto speciale*), the quota of their *fabbisogno sanitario* not covered by the financial channels under points a)-c) is to be financed through their own resources (additional contribution) ⁽²¹²⁾.

Regions are required to ensure a budget balance position. If they fail to comply with this requirement, a set of automatic measures is foreseen in order to restore the budget balance position (mainly the increase of regional taxes). In case of a deficit exceeding the 5% threshold (computed as a ratio between the value of regional deficit in nominal terms and the financial resources assigned to regions to finance health expenditure), regions are obliged to present a 'Deficit Reduction Plan' (*Piano di Rientro*). The latter has a time horizon of three years and lays down all the necessary measures to be taken by the region concerned to achieve the budgetary balance.

Revenue collection mechanism (tax/social security contributions/premium)

In 2015, 75.6% of total health expenditure funding came from earmarked public sources, including regional tax on production activities (corporation tax on the value added of companies and on the salaries of public sector workers - IRAP), regional

⁽²¹¹⁾Including foreign citizens, and their dependent relatives, who are in one of the following positions: a) employed; b) enrolled in the employment lists; c) had applied for a renewal of the permit of stay. As for dispositions concerning non- EU citizens, see law 40/1998, articles 32-34.

⁽²¹²⁾For region Sicily only, this additional contribution accounts for at maximum 49.11% of its *fabbisogno sanitario*. The remaining part is financed by the National Health Fund (*Fondo Sanitario Nazionale*).

surcharge on income tax and a share of VAT revenue (see §. 1).

Administrative organisation: levels of government, levels and types of social security settings involved, Ministries involved, other institutions

According to the organisational setting of the Italian Health Care System, the Ministry of Health, in agreement with the Ministry of Economy and Finance, defines general objectives and national policy priorities, as well as the basic levels of health care treatments which are provided for free over the national territory (so called *Livelli Essenziali di Assistenza-LEA*); regions are in charge with planning, coordinating and providing health services (including primary, specialist outpatient and hospital care, health promotion, disease prevention and rehabilitation, long-term nursing and psychiatric care) for their residents. They have large autonomy in the way they organise care delivery, within the general framework designed at national level. The funds to be allocated to each type of care are somewhat determined by both the central government and regions.

A Committee (so-called *Comitato LEA*) is in charge of monitoring the provision of LEAs in each region; the Committee is composed of representatives of the ministries concerned (Health and Economy and Finance), the Department of Regional Affairs (within the Presidency of the Council of Ministers) and Regions⁽²¹³⁾.

Regions may choose to provide extra LEA benefits, and some do, but the relative costs should be covered through their own financial resources.

As foreseen by Law 208/2015, a new Decree regulating the LEA was issued, in January 2017, in replacement of the previous one adopted in 2001. The principal novelties introduced by the decree are as follows:

- health provisions that were already included in the LEA have been better detailed;

⁽²¹³⁾ Such a Committee was first established in 2005, according to article 9 of the Health Pact of 23rd March 2005.

- out of date health provisions have been eliminated and replaced with others more technologically advanced;
- the lists of chronic and invalidating diseases which give right to the exemption from co-payments have been updated;
- new compulsory vaccines have been foreseen.

Coverage (population)

Health services are provided for free to all citizens; however, a fee (co-payment) may be requested for the provision of some health services (e.g. specialist health services) depending on income and age requirements.

Treatment options, covered health services

Primary care and hospital inpatient care are free at the point of use. Outpatient specialist consultations that follow a referral from a general practitioner (GP - family doctor), diagnostic procedures involve a small fee as do pharmaceuticals prescribed by a physician in those regions who have chosen to use a fee. Unwarranted visits to emergency departments also involve a fee. Dental care is guaranteed for specific groups of the populations (children, vulnerable groups such as disabled, people with HIV and those with rare diseases) and in emergency cases, while others purchase dental care are out-of-pocket. Eyeglasses and contact lenses and dental prostheses are not funded or provided by regions. Patients visiting a physician without a referral or buying over-the-counter medicines have to pay for the full cost of care out of their pockets. Children below six, and elderly (65+) individuals with an income below a certain threshold, pregnant women and people with certain medical conditions are exempted from cost-sharing. According to the OECD (2010) 15.6% of the population buys duplicative private insurance (to cover for the same services covered by public provision/ funding).

Waiting times and lists for specialist consultation and hospital surgery are considered long by the population and there are important regional variations in the waiting time, which are seen as a problem in Italy. To reduce waiting times, the 28th of October 2010 the Agreement between the

Government, the Regions and Autonomous Provinces on the Government National Plan of waiting lists (PNGLA) for 2010-2012 was signed ⁽²¹⁴⁾. In addition, patients are allowed to obtain hospital care in other regions and there is a system of interregional compensation whereby regions paid for the patients they send away and receive the payments of those who come into the region to receive treatment. The interregional mobility is directly related to the right of citizens to choose health care treatments, for example by accessing high specialised health structures located out of their own region.

Role of private insurance and out of pocket payments

In 2015, 24.4% of total (public and private) health care expenditure came from out-of-pocket payments and private insurance altogether. The remaining 75.6% was publicly funded. The share of out-of-pocket payments in Italy is currently above EU average (15.9% in 2015).

Types of providers, referral systems and patient choice

As the responsibility for care delivery has been delegated to the regions, there may be differences in the way the various types of care are organised/delivered.

In general, health care services are provided for free through public providers (ASLs, public hospitals, university public hospitals) as well as private accredited providers. Health services can be delivered also by private non-accredited providers but the relative costs are fully charged on the users.

Primary care is provided by independent general practitioners (GPs) and paediatricians acting on the basis of a contract with the NHS, and running their activities in single practices or in joint practices (for which a financial incentive is provided).

Outpatient specialist care is provided by specialist doctors in outpatient departments in hospitals as well as in private ambulatories (both accredited

and not accredited). A decree of Ministry of health (issued according to Decree law 78/2015, converted into Law 125/2015) has laid down supplying conditions and appropriateness indications, which doctors must report in their prescriptions. In case doctors do not comply with this obligation, the additional part of their compensation is reduced and any specialist care provided in contrast with the decree is charged to patients.

Day case and inpatient care also take part in hospitals. Provision has traditionally been public but currently health services are provided also by private providers. According to the OECD (2012), about 68% of all acute hospital beds are public, 4% are private not-for profit and 28% is private for profit. Some public hospitals (*Aziende Ospedaliere*) have also been given financial and technical autonomy (contracting with the ASLs), while others remain under the direct management of the ASLs.

The ASLs oversee also health promotion, disease prevention and occupational diseases activities.

The number of practising physicians per 100 000 inhabitants (384 in 2015) is above the EU average (344 in 2015). The number of GPs per 100 000 inhabitants (74 in 2015) is broadly in line with the EU average for the same year (78). The number of nurses per 100 000 inhabitants (544 in 2015) is well below the EU average of 833.

The authorities' efforts to encourage the use of primary care vis-à-vis specialist and hospital care include compulsory registration with a GP and a compulsory referral system from primary to secondary care (i.e. GPs act like gatekeepers to specialist and hospital care), while allowing patient choice of GP, specialist and hospital ⁽²¹⁵⁾. The coverage of primary care services in health centres is guaranteed over 24 hours, through the primary care out of hours (so called *guardia medica*). Over time there has been a strong emphasis on primary care as the first point of access to care, emphasis that is to continue to ensure quality and efficiency of care. Patient satisfaction with primary care GPs and paediatricians is high. Moreover, the authorities have been introducing a number of ICT

⁽²¹⁴⁾ For further information, see: http://www.salute.gov.it/portale/temi/p2_5.jsp?area=qualita&menu=liste.

⁽²¹⁵⁾ Indeed, according to the OECD, the level of choice of provider and gatekeeping in Italy both score of 6 out of 6.

and e-health solutions to allow for nationwide electronic exchange of medical data (including patient electronic medical records and patient e-card) to support care coordination, reduce medical errors and increase cost-efficiency as well as monitoring activity and consumption.

The number of acute care beds per 100 000 inhabitants (264 in 2015) is below the EU average (402 in 2015). In line with the EU trend, the number of acute beds in Italy has been decreasing over the last decade (344 in 2005), as a result of the policies run over the last years aimed at reducing the rate of acute beds towards the standard levels set by the current legislation ⁽²¹⁶⁾. In some areas there may be a shortage of follow-up/long-term care beds/ facilities which might create bed-blockages in acute care. It is regional government to plan for the number of hospitals, the provision of specific specialised services.

Pricing, purchasing and contracting of healthcare services and remuneration mechanisms

Primary care physicians are paid on a capitation basis, while outpatient and inpatient specialists acting in public structures are paid by a salary. The pay scale is determined at national level. Primary care physicians appear to be eligible to receive bonuses regarding preventive care or disease management activities ⁽²¹⁷⁾. Private sector doctors are paid a fee-for-service.

Hospitals remuneration is on a payment per case basis using DRGs ⁽²¹⁸⁾. Hospital remuneration

⁽²¹⁶⁾ According to law decree 95/2012, the standard rate for acute care beds is set at 300 per 100 000 inhabitants.

⁽²¹⁷⁾ It is foreseen by article 8 of the National General Agreement (Accordo nazionale collettivo) concerning the discipline of GP.

⁽²¹⁸⁾ The OECD score for remuneration incentives to raise the volume of care in Italy is a bit more than 3 out of 6 as a result of the use of activity related payment in hospital remuneration though not in other areas. The OECD overall efficiency score for Italy is slightly higher than its group average (about 1.8 years potential gain to be made through greater efficiency in the sector compared to the group average of 2.6 years) and above the OECD average (2.3 years). There are nevertheless areas for improvement including: continue to improve efficiency in the hospital sector notably through the publication of comparable information on activity and quality and/or through an element of activity related payment of physicians; increasing consistency in the allocation of resources across levels of government.

methods are defined at central level with the DRG weights and other service rates negotiated at regional level.

When looking at hospital activity, inpatient discharges per 100 inhabitants are below the EU average (11 vs. 16 in 2015). Day case discharges have almost halved through the decade (contrary to the EU trend which has seen a steady increase ⁽²¹⁹⁾), and they are well below the EU average (7635 in 2015). On the contrary, overall inpatient hospital length of stay (7.8 days in 2015) ⁽²²⁰⁾ is in line with the EU average, though slightly above (7.6 days).

The market for pharmaceutical products

Total (1.6%) and public (1.0%) expenditure on pharmaceuticals as a percentage of GDP was broadly in line with the EU average (respectively 1.4% and 1%) in 2015. Total (17.9%) and public (15.0%) pharmaceutical expenditure as a percentage of total current health expenditure is respectively above and slightly below the EU average (14.6% and 12.7% in 2015). The policy priority is to keep under control the dynamics of public pharmaceutical expenditure by fixing appropriate ceilings as a share of the financing level of the National Health Service (*Servizio Sanitario Nazionale* - SSN) contributed by the State ⁽²²¹⁾.

The authorities have implemented a number of policies to control expenditure on pharmaceuticals, based on (i) limits to expenditure dynamics and (ii) control of pharmaceuticals prices. Expenditure rules on pharmaceutical products exist since 2001; however, since 2008, a new rule was introduced, foreseeing thresholds for pharmaceutical products supplied by pharmacies or, directly, by the ASLs. The rule established two expenditure ceilings for pharmaceutical products (including patient co-payments) expressed as a percentage of the financing level for the National Health Service

⁽²¹⁹⁾ This refers to the aggregate EU-28.

⁽²²⁰⁾ Eurostat, Last update 10.07.15, In-patient average length of stay (in days), Services of curative care.

⁽²²¹⁾ For the details, see section 6.

contributed by the State. Starting from 2017, the thresholds are set as follows ⁽²²²⁾:

- 7.96% for pharmaceutical products supplied by pharmacies;
- 6.89% for pharmaceutical products directly supplied by the ASLs and hospitals;

The expenditure ceilings must be respected both at regional and national levels.

As for the latter expenditure item, since 2008 an automatic procedure (so-called pay-back) is in place to compensate for possible overruns.

Concerning price control policies, the initial price of a new pharmaceutical product is based on clinical performance, economic evaluation, on the cost of existing treatments. There are controlled price updates. Price setting involves important negotiations between the Italian Pharmaceutical Agency (*Agenzia Italiana del Farmaco - AIFA*) and the pharmaceutical companies and negotiations take into consideration the social relevance of the disease, the effect of the medicines, the expected utilisation and financial impact, prices in other countries, prices of similar products in Italy. Discounts, payback and price freezes and cuts are some of the mechanisms used to directly control expenditure. There is a positive list of reimbursed products which is based on health technology assessment information/economic evaluation. Reference pricing for reimbursement purposes is also applied. For medicines for which generics are available the reimbursement level is set at the lowest price of the drugs in a group (defined as drugs with same active ingredient, bioequivalent form and therapeutic indications), and the cheapest price must be at least 20% lower than the originator product. For those without generics, the reimbursement level of a new drug is based on a sort of average cost of a defined group of medicines that are related but slightly different chemically.

Authorities promote rational prescribing of physicians through treatment and prescription

⁽²²²⁾ Before 2017, the threshold were, respectively, 11.35%, and 3.5%, being the pharmaceutical products supplied by the ASLs included in the former instead of in the latter.

guidelines complemented with education and information campaigns on the prescription and use of medicines and the monitoring of prescribing behaviour (by regions and ASLs). GPs receive some kind of feedback on their prescription patterns. Authorities also pursue information and education campaigns directed at patients and some regions have introduced a small fee for either pack or receipt to make patients more sensitive to the cost of medicines and encourage a rational use of medicines on the patients' side. There is an explicit generics policy. Generic sales' targets are set by the Italian Pharmaceutical Agency. Generic substitution takes place i.e. pharmacies are obliged to offer the generic medicine when available. If patients refuse a generic, they will have to pay the difference between the reimbursement price of the branded drug and the pharmacy retail price of the cheapest available generic. Generics are exempted from the mandatory discount of pharmacies to the NHS so as to encourage pharmacies to hold and sell generics.

In order to monitor and keep under control the dynamics of pharmaceutical expenditure and GPs' prescriptions, a comprehensive information system called "*Sistema Tessera sanitaria*" has been implemented.

Use of Health Technology Assessments and cost-benefit analysis

Health Technology Assessment is undertaken at various levels although there is no national structure responsible for conducting, promoting, coordinating or financing HTA. There are clinical guidelines for medical interventions and medicines established through the National Programme on Clinical Guidelines.

E-health (e-prescription, e-medical records)

Starting from 2003, the "*Tessera Sanitaria*" information system (herehence "TS") has been gradually implemented under the supervision and management of the Ministry of Economy and Finance - Department of General Accounts. In 2009, such a system was fully implemented in all regions and since then it has been regularly utilised for the monitoring of the full procedure for pharmaceutical and specialist care provisions, from the prescription to the delivery. Besides, through a set of performance indicators, the *Tessera*

Sanitaria system allows to make cross-regional comparative analysis on the efficiency and appropriateness of prescriptions.

Since 2013, the *TS* has also been utilised for the gradual implementation of the electronic medical prescription (*ricetta elettronica*) over the entire national territory, in line with the programme of the Italian Digital Agenda (*Agenda Digitale Italiana*) which foresees the full dematerialisation of medical prescriptions. In this regards, the *TS* has implemented a technological infrastructure for electronic interconnection with doctors, pharmacies, hospitals and other public health body, or private health body accredited by the National Health System ⁽²²³⁾.

Since 2015, the *TS* also allows patients to check on-line their own private expenses on pharmaceutical and specialist care before they are submitted to the Fiscal Agency (*Agenzia delle entrate*) for the pre-filled income tax statement (*730-precompilato*). More recently, based on the Budget law for 2016, such electronic procedures have further strengthen in order to allow all patients to access and check on-line their health expenses all over the year regardless the transmission to the Fiscal Agency.

Finally, the implementation of the patient's electronic health record (*Fascicolo Sanitario Elettronico*), that was foreseen by law decree 179/2012, article 12, has been sped up through the involvement of the *TS*. In fact, the Budget Law for 2017 (Law 232/2016) assigned to the *TS* the task of creating the interoperability system (interconnection amongst regions) and the subsidiarity system (interconnection amongst health bodies within a region), for those regions still lacking of it. The directorial decree regulating both electronic systems was issued in August 2017 and, to date, the activities involved are nearing completion.

⁽²²³⁾ All this further strengthens the accuracy and timeliness in checking prescription appropriateness and requirements for co-payment exemptions. In 2015, about 350 million of dematerialised prescriptions were issued. Thanks to the e-prescription system, since 1st March 2016 the validity of prescriptions has been extended also to regions other than that of residence.

Health and health-system information and reporting mechanisms

Following a pilot period, a comprehensive information and monitoring system (National Healthcare Information System) - using 130 indicators and covering population health status, budgetary and economic efficiency, organisation climate and staff satisfaction, patient satisfaction, performance indicators (appropriateness, quality) and effectiveness in reaching regional targets - is now fully operational. A comprehensive set of indicators has been introduced by the Health Pact 2010-2012, for evaluating the performance of regional health services.

Several regions have adopted the system which uses standard codes. As a result, Italy will be able to gather extensive information at regional and sub-regional levels, which is publicly available on a website allowing for public comparisons. Such a system, allows regions to identify good practices as well as areas for improvement. Physicians are being monitored in terms of their activity and compliance with guidelines as well as their prescription behaviour. They receive feedback on their prescription patterns.

Health promotion and disease prevention policies

The central Government through the Ministry of Health sets and monitors public health priorities in terms of process, outcomes and the reduction of health inequalities. There are some risk factors that can translate into an important burden of disease and financial costs. The latest National Health plan lists a number of priority areas for health promotion and disease prevention which is proposed as good practice across the regions. Health promotion and disease prevention activities have not historically received the same emphasis as in other countries in the EU, as seen by its pattern of expenditure and some indicators. However, in 2015, public and total expenditure on prevention and public health services as a % of GDP are in line with the EU average (0.3% and 0.4% vs. 0.3% and 0.3% for the EU average in 2015), after a decade of consistently being markedly lower than average. Public and total expenditure on prevention and public health services as a % of current health expenditure (public and total, respectively) are currently both

above the EU average (4.7% vs. 3.2% and 4.0% vs. 3.2% in 2015).

Transparency and corruption

In order to guarantee the full accountability and monitoring of health sector, Italy has implemented an integrated governance framework.

Health expenditure trends are analysed on a quarterly and yearly basis, relating on a set of standardised economic accounts, mainly based on a profit and losses account and a balance sheet account. These accounts are filled at the regional level and single public provider of health services, on the basis of harmonised recording criteria.

A dedicated committee (named “*Tavolo degli Adempimenti*”) is in charge with the analysis of expenditure trend, the verification of the budget balance position and the fulfilment of the other requirements envisaged in the legislation.

A bonus (equal to the 3% of the regional share of national health fund) is granted to regions conditionally to a positive evaluation by the *Tavolo degli Adempimenti* about the fulfilment of all the requirements (and, firstly, the budget balance position) envisaged in the legislation.

Recently legislated and/or planned policy reform

In July 2014, a new Health Pact was signed between central government and regions. The main issues regulated by the Pact were as follows:

- the financial framework, i.e. the national level of public resources for the financing of the LEA (fabbisogno nazionale standard) for each of the years 2014-2016;
- a procedure for the revision of the current basic healthcare levels (LEA), which was subsequently adopted by a pertinent decree issued in January 2017 (see above);
- a strengthening of monitoring activity, through an increased role of the National Agency for regional Health Services (Agenzia Nazionale per i Servizi Sanitari Regionali, AGENAS) in

evaluating the quality of regional health services.

Furthermore, the budget law for 2016, introduced a Deficit Reduction Plan (Piano di Rientro) procedure also for hospital bodies as an additional tool to restore budget balance positions and improve an efficient use of public resources.

Since 2015, a few interventions have been adopted in order to set and revise the level of resources for the financing of the public health care system:

- Law 208/2015 (art. 1, paragraph 508) has redefined the level of the financing resources in 111.002 euro for 2016 and set it to 113.063 euro for 2017, 114.998 for 2018 and 117.988 euro for 2019;
- Law 232/2016 (art. 1, paragraph 392) has downsized the level of the financing resources to 113.000 euro for 2017, 114.000 euro for 2018 and 115.000 euro for 2019;
- Decree foreseen by Law 232/2016, art. 1, paragraph 394 has further reduced the level of the financing resources to 112.577 euro for 2017, 113.396 euro for 2018 and 114.396 euro for 2019.

More recently, in January 2017, a decree was adopted that updated the basic health care levels (LEA), to be guaranteed to all citizens.

In the same year, a legislative intervention laid down the obligation for children younger than sixteen to undergo ten vaccines, charging the cost on the NHS.

Challenges

The analysis above shows that a range of reforms have been implemented in recent years, for example, to strengthen primary care provision and its use, to improve efficiency, to improve data collection, information and monitoring systems and the use of ICT solutions, to control overall expenditure and pharmaceutical expenditure while delivering quality healthcare. They were to a very large extent successful and, therefore, Italy should continue to pursue them. The main challenges for the Italian health care system are as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated care as well as a focusing on costs, to tackle the impact on spending due to population ageing and non-demographic factors.
- To extend the possibilities of hospitals to provide ambulatory and day care as well as to transfer more health care services into the ambulatory sector in order to reduce the number of inpatient care treatments, as well as to strategically direct more resources towards providers of lower levels of care, to increase efficiency.
- To tackle unwarranted regional variation in waiting times and resource distribution. In particular, monitor and correct potential uneven distribution of hospital beds (follow-up and long-term care), to free-up capacity in acute settings as a driver of lower waiting times. To the same end, further develop ICT solutions to increase service efficiency of operations.
- To re-think the current mix between doctors and nurses, to favour solutions that relying less heavily on doctors, in the cases where nurses can represent a substitute, consistently with a more primary-care oriented system.
- To further the efforts in the field of pharmaceuticals by considering additional measures, both on the side of patients and of health care professionals, to improve the rational prescribing and usage of medicines. The policies could help reducing the high level of out-of-pocket payments and improving access to cost-effective new medicines by generating savings to the public payer.
- To ensure a greater and nationally coordinated use of health technology assessment to determine new high-cost equipment capacity, the benefit basket and the cost-sharing design across medical interventions.
- To implement the National Health Information System across all regions and sub-regional levels which has a strong potential to monitor and relate expenditure with activity and with outcomes and in identifying good practices and areas for improvement. To encourage debate, information exchange, and peer reviews between regions once the system is fully implemented. In this context, the patient e-card (*Tessera Sanitaria*) should be fully exploited.
- To continue to monitor regional expenditure policies making regions showing deficit in the health sector budget restore the balance and ensure efficiency and appropriateness in the provision of LEAs. To continue to improve accountability and governance of the system and identify possible cost-savings in the health sector administration, as it currently involves national and regional institutions.
- To further the efforts to support public health priorities and enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening.

Table 2.15.1: Statistical Annex – Italy

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	1,490	1,548	1,610	1,632	1,573	1,605	1,637	1,613	1,605	1,622	1,652	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	27.8	28.6	29.2	28.4	26.1	26.5	26.7	26.3	25.3	25.3	26.1	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	0.3	1.6	0.9	-1.8	-6.0	1.3	0.2	-3.3	-2.2	-0.1	1.0	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	2.9	-2.6	2.6	-0.5	1.4	-1.4	-3.2	-2.4	0.3	0.8	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.7	8.8	8.5	8.9	9.4	9.4	9.3	9.3	9.3	9.3	9.3	10.2	10.1	10.1	10.2
Total current as % of GDP	7.9	7.9	8.2	8.4	8.5	8.2	8.6	9.0	9.0	9.0	9.0	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.8	1.0	0.3	0.5	0.9	1.3	0.7	0.3	0.3	0.3	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	2,219	2,328	2,329	2,448	2,483	2,527	2,531	2,495	2,463	2,455	2,495	2,745	2,895	2,975	3,305
Public total as % of GDP	6.8	6.9	6.6	7.0	7.4	7.4	7.1	7.1	7.1	7.1	7.0	8.0	7.8	7.8	8.0
Public current as % of GDP	6.5	6.6	6.3	6.7	7.0	7.0	6.8	6.8	6.8	6.8	6.7	7.7	7.6	7.6	7.8
Public total per capita PPS	1,732	1,817	1,819	1,925	1,960	1,981	1,935	1,916	1,894	1,877	1,887	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.32	0.31	0.32	0.34	0.40	0.36	0.28	0.31	0.31	0.29	0.28	0.2	0.2	0.2	0.2
Public as % total expenditure on health	78.1	78.1	78.1	78.6	79.0	78.4	76.5	76.8	76.9	76.4	75.6	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	15.1	14.5	15.1	14.9	14.6	14.5	14.2	13.9	14.1	13.9	13.9	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	20.7	20.4	20.7	20.6	19.7	19.5	21.0	21.7	21.8	22.1	22.8	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	57.9	58.1	58.2	58.7	59.0	59.2	59.4	59.4	59.7	60.8	60.8	502.1	503.0	505.2	508.5
Life expectancy at birth for females	83.6	84.1	84.2	84.2	84.3	84.7	84.8	84.8	85.2	85.6	84.9	82.6	83.1	83.3	83.3
Life expectancy at birth for males	78.1	78.6	78.8	78.9	79.1	79.5	79.7	79.8	80.3	80.7	80.3	76.6	77.3	77.7	77.9
Healthy life years at birth females	67.8	64.7	62.6	61.8	62.6	:	62.7	61.5	60.9	62.3	62.7	62.0	62.1	61.5	63.3
Healthy life years at birth males	66.6	65.2	63.4	62.9	63.4	:	63.5	62.1	61.8	62.5	62.6	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	:	62	61	61	59	55	100	99	94	90	93	64	138	131	127
Infant mortality rate per 1 000 live births	3.3	3.2	3.1	3.1	3.2	3.0	2.9	2.9	2.9	2.8	2.9	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	2.7	2.6	2.6	2.5	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	0.4	0.4	0.4	0.4	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	3.0	3.0	2.9	3.1	3.3	3.3	3.3	1.9	1.9	2.0	2.0	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.7	1.7	1.6	1.6	1.7	1.7	1.6	1.5	1.5	1.5	1.6	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.4	0.4	0.4	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	2.6	2.5	2.5	2.4	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	0.4	0.4	0.4	0.4	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.0	2.1	2.2	2.1	2.2	2.4	2.5	1.2	1.2	1.2	1.2	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	1.0	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.15.2: Statistical Annex - continued - Italy

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	30.0%	29.4%	28.6%	27.9%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	4.6%	4.2%	4.3%	4.2%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	37.9%	38.3%	35.8%	37.0%	39.1%	40.9%	38.9%	21.1%	21.5%	22.2%	22.7%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	21.6%	21.7%	19.9%	19.7%	20.1%	20.6%	19.1%	16.5%	17.0%	17.0%	17.9%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	2.8%	2.8%	2.9%	2.8%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.8%	2.9%	2.8%	2.9%	3.0%	3.1%	2.8%	4.0%	4.0%	4.1%	4.0%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	0.9%	1.0%	0.9%	1.0%	1.0%	1.2%	1.1%	1.9%	1.9%	1.8%	1.9%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	38.1%	37.2%	36.4%	35.9%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	5.6%	5.1%	5.3%	5.2%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	30.6%	32.6%	34.1%	31.5%	31.5%	34.4%	36.2%	17.4%	17.9%	18.2%	18.1%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	14.0%	13.9%	13.6%	12.8%	12.9%	12.8%	12.3%	13.0%	13.5%	13.8%	15.0%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	0.7%	0.7%	0.7%	0.7%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	4.7%	4.8%	4.8%	4.7%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	1.1%	1.2%	1.2%	1.2%	1.2%	1.4%	1.4%	1.8%	1.6%	1.6%	1.6%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	1.48	1.67	1.85	1.97	2.12	2.20	2.36	2.46	2.52	2.62	2.82	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	1.0	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.4	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	2.8	2.9	3.0	3.0	3.1	3.2	3.2	3.3	3.3	3.3	3.3	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.1	0.1	0.2	0.2
Proportion of the population that is obese	9.9	10.2	9.9	9.9	10.3	10.3	10.0	10.4	10.3	10.5	9.8	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	22.3	23.0	22.4	22.4	23.3	23.1	22.5	22.1	21.1	19.7	19.8	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	8.7	8.4	8.4	8.0	7.3	7.0	7.0	7.5	7.3	7.6	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	:	:	:	:	368	:	:	387	390	388	384	324	330	338	344
Practising nurses per 100 000 inhabitants	:	:	:	:	:	:	:	:	508	528	544	837	835	825	833
General practitioners per 100 000 inhabitants	80	79	79	78	77	76	76	76	75	74	74	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	6.1	:	:	:	:	:	:	:	6.8	:	:	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	15	14	14	14	13	13	12	12	11	11	11	17	16	16	16
Day cases discharges per 100 000 inhabitants	6,803	6,649	6,156	5,958	5,414	5,097	4,757	4,350	4,070	3,771	3,467	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	77.0	78.0	78.3	78.8	79.4	78.7	78.5	77.5	77.3	77.6	78.9	77.1	76.4	76.5	76.8
Hospital average length of stay	6.7	6.7	7.5	7.6	7.6	7.6	7.7	7.7	7.7	7.8	7.8	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	31.8	31.5	30.7	:	29.0	28.5	28.0	26.4	25.6	24.8	23.2	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	6.3	6.2	6.3	6.5	6.7	6.9	7.1	7.2	7.2	7.1	7.0	7.0	Italy	EU	
AWG risk scenario	6.3	6.2	6.5	6.7	6.9	7.1	7.3	7.5	7.6	7.5	7.5	7.5	0.7	0.9	
Note: *Excluding expenditure on medical long-term care component.													1.1	1.6	
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	60.8	60.7	60.5	60.4	60.2	60.0	59.6	59.0	58.0	56.9	55.8	54.9	Italy	EU	
													-9.6	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.16. LATVIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

With a GDP of around €24 bn or 16,200 PPS per capita in 2015, Latvia is below the EU average GDP per capita of €29,600.

During the coming decennia the population of Latvia will gradually decline, from 2.0 million inhabitants in 2016 to 1.3 million inhabitants in 2070. This 32% fall contrasts sharply with the EU average increase of 2%.

Total and public expenditure on health as % of GDP

Total expenditure ⁽²²⁴⁾ on health as a percentage of GDP (5.7% in 2015) is below the EU average ⁽²²⁵⁾ of 10.2%. Public expenditure is at 3.3% (2015) of GDP, far below the average of 7.8% in 2015. Looking at health care expenditure without long-term care ⁽²²⁶⁾ reveals a similar picture with public spending being below but slightly closer to the EU average (2.8% vs 6.8% in 2015).

When expressed in per capita terms, total spending on health at 1185 PPS in Latvia is below the EU average of 3305 in 2015. So is public spending on health care: 709 PPS vs. an average of 2609 PPS in 2015.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.6 pps of GDP, below the average growth expected for the EU of 0.9 pps of GDP according to the AWG reference scenario. When taking into account the impact of non-demographic drivers on future

⁽²²⁴⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽²²⁵⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽²²⁶⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.8 pps of GDP from now until 2070 (EU: 1.6) ⁽²²⁷⁾.

Latvia faces only low fiscal sustainability risks in the short, medium and long-term. Nonetheless, addressing the underfinancing of the healthcare services might lead to higher public spending in the medium to long term ⁽²²⁸⁾.

Health status

Life expectancy at birth continues to increase gradually in Latvia (79.6 years for women and 69.8 years for men in 2016) but it is far below the respective EU averages (83.6 and 78.2 years of life expectancy) ⁽²²⁹⁾. Healthy life years, at 54.9 years for women and 52.3 for men are below the EU averages of 64.2 and 63.5 in 2016. The infant mortality rate of 3.7‰ is around EU average of 3.6‰ in 2016.

As for the lifestyle of the Latvian population, there is a proportion of regular smokers of 24.1 % above the EU average of 20.9% in 2014 ⁽²³⁰⁾. Alcohol consumption is, at 10.4 litres per capita, slightly higher than the EU average of 10.2 ⁽²³¹⁾.

System characteristics ⁽²³²⁾

Coverage

The Latvian health system is a tax-funded social insurance system. The services included in the statutory provision are determined by law.

⁽²²⁷⁾ The 2018 Ageing Report https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽²²⁸⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽²²⁹⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

⁽²³⁰⁾ European health interview survey https://ec.europa.eu/eurostat/statistics-explained/index.php/Tobacco_consumption_statistics.

A third wave of the European health interview survey (the source of these data) is being conducted in 2019.

⁽²³¹⁾ OECD Health at a glance (2018) and World Health Organisation, Pure alcohol consumption, (2014) https://gateway.euro.who.int/en/indicators/hfa_426-3050-pure-alcohol-consumption-litres-per-capita-age-15plus/visualizations/#id=19443&tab=table.

⁽²³²⁾ This section draws on ASISP (2014)

Public health care benefits provided in kind include a wide range of services provided by GPs, specialists, hospitals and emergency care units, as well as pharmaceutical care. Cash health care benefits (including maternity and sickness) are provided through social insurance, financed through mandatory insurance contributions from employers and employees ⁽²³³⁾.

Despite full population coverage, the services available 100% free of charge are limited. The system suffers from low accessibility due to financial reasons. In 2016, 5.3% of the population reported unmet needs for health care (according to EUROSTAT) because they could not afford it financially (in contrast with the EU average of 1.6%), while in the lowest income quintile the rate reported is close to 13.1%. This is one of the highest levels of unmet need for health care in the EU and has been so for a decade, being significantly different from its Baltic neighbours (Lithuania and Estonia). Self-reported unmet need for dental examination due to affordability concerns are also the highest in the EU (26.8% for the 1st income quintile, i.e. the poorest, and 13.2% for the total population in 2016, in comparison with the EU average of 3.6%).

Patients pay directly for those services that are not financed by the state, for example, dental care for adults, psychotherapy, most available rehabilitation and physiotherapy services as well as a significant proportion of medicines. Patients also pay the full cost if they do not follow the standard procedure for accessing publicly financed care (for example, directly visiting a specialist without first obtaining a primary care referral when required). This is most often the case when patients wish to avoid waiting lists for publicly funded care. Additionally, patients also pay in full the cost of all services provided by health care providers who have not contractual agreements with the National Health Service (NHS). However, there are numerous direct access specialists to whom no referral is required (detailed information in next section). The patient contribution (for adult patients) is of €1.42 for a visit to the general practitioner and €4.27 for a visit to the specialist with referral and out-patient visit to direct access specialist. 2015 data shows that Latvia has the fifth highest incidence of "under-the-table payments" to

⁽²³³⁾ ASISP (2014).

doctors on the part of patients (Health Powerhouse (2015)).

During the economic crisis until 2012 some new measures were introduced as an additional social safety net. An exemption from patient charges was introduced for those households with a monthly income below €71 per family member. Those with an income below €13 euro were exempted from 50% of fees. From 2012 this was scaled back, with only those with an income below €28 being exempted. This threshold appears to be too low to ensure good health care access for those from vulnerable groups. As obtaining this status requires several administrative procedures such as means-testing, and the latter may act as barriers to access for the elderly and infirm.

Nevertheless from 2015 payment of daily treatment in hospital was reduced from €13.52 to 10 euro, as well as the patient's co-payment (for a surgical procedure in hospital) was reduced from €42.69 to €31. Since 2015 in order to improve the availability of pharmaceuticals and medical devices for children under the age of 18, the reimbursable pharmaceuticals and medical devices in accordance with positive list are reimbursed at 100%.

Since January 2016, amount of State compensated medicines for treatment hepatitis C increase from 75% to 100%. Also, since 2018 the amount of State compensated medicines for treating Crohn's disease, Psoriasis and ulcerative colitis has increased from 75% to 100%.

The share of private expenditure on health in total health expenditure (40.2% in 2015) is far higher than the EU average of 21.6%. Out-of-pocket expenditure constitutes about 42.07% of total health expenditure, far above the EU average (21.8% in 2015).

Beyond affordability, low accessibility is also influenced by long waiting lists for diagnostics and treatments. As of 2014, cancer patients with cancer had to wait on average 25 working days after diagnosis for treatment. The waiting time for an appointment with a rheumatologist was 86 working days ⁽²³⁴⁾.

⁽²³⁴⁾ ASISP (2014).

Since October, 2016 patients where there is suspicion of malignancy are able to receive the necessary examinations and investigations (primary diagnostics) within 10 working days from the date of signing up for the examination. This referral can be made by general practitioners, gynaecologists or prison doctors and, after diagnosis can lead to specialist referral at a specialised hospital. The hospital then has to provide a consultation for the patient within 10 working days from the date of signing. The specialist decides about the necessary additional examinations (secondary diagnostics) in specialised hospitals and gives a referral to the patient. Secondary diagnostic examinations should be provided in time to ensure that the decision about the treatment is taken within a month of the first specialist consultation. It encourages priority of health care service receipt, shifting these patients from the total patient flow and allowing to plan the necessary resources for early diagnosis of oncological patients.

However, according to the law passed on December 2017, from 2019 the basket of publicly available services will however be divided into a minimum and a maximum basket.

The minimum basket of services includes: 1) full access to the GP (incl. diagnostic examinations for the treatment according to the competence of the GP); as well as medicines and medical devices prescribed by the GP for outpatient treatment of diseases which have a significant impact on public health or endanger public health. 2) maternity care; 3) emergency services; 4) health services related to the treatment of diseases that have a significant effect on public health indicators or which threaten public health (including mental illness, tuberculosis), as well as medicines and medical devices for ambulatory treatment of these diseases. However, it does not include access to public specialised care beyond the cases considered above.

Minimum basket is granted for all citizens and non-citizens of Latvia, third-country nationals who have a permanent residence permit in Latvia and stateless persons to whom the status of a stateless person has been granted in Latvia as well as refugees, asylum seekers or persons who have been granted an alternative status.

The list of the health care services in the minimum basket will be stipulated in the Regulation of Cabinet of Ministers by 1 September 2018.

The Healthcare Financing Law states also the full basket of services which includes: 1) all services provided in the minimum basket; 2) secondary and tertiary health care services, as well as medicines and medical devices intended for outpatient treatment in accordance with the regulatory acts regarding the procedure for the reimbursement of expenses for the purchase of medicines and medical devices for ambulatory treatment.

Full basket of the health care services provided by the state is granted for socially insured persons or those persons who have made health insurance contributions. In addition, there is a list of other groups qualifying for the full basket guaranteed by state, meaning they do not have to pay any contribution (except patient contributions if they are not exempted from those as well). In the list inter alia is included children up to 18 years, persons with I and II disability group (from 01.01.2021. also, persons with III disability group), persons receiving services of long-term social care institutions, persons studying in the educational institutions, unemployed persons, persons who have reached the age of old-age pension etc.

Those groups, which are not paying social contributions (for example those working under micro-enterprise tax regime) to state budget, to receive the full basket are expected to pay a contribution set at 1% of minimum remuneration in 2018 (€1.6 annually), rising to 3% of minimum remuneration amount in 2019 and 5% of minimum remuneration amount from 2020 onwards.

While this new reform aims at improving the incentives for citizens to make health care contributions so as to receive the maximum basket, it effectively limits the universality of access to health care by curtailing the access to specialised care for those who receive only the minimum basket. As such it is likely to worsen the accessibility of health care in Latvia⁽²³⁵⁾.

⁽²³⁵⁾ See LV Country Report 2018 https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-latvia-en_1.pdf.

Administrative organisation and revenue collection mechanism

Public funding, including transfers from general taxes (state or municipal budgets), together constitute 59.8% of total health expenditure funding (2015), compared with the EU average of 78.4%.

Financial resources for the public health system come from central government general taxation. As explained above, out-of-pocket payments are also a very important financial source for the system.

The Saeima in 27.07.2017 adopted amendments to the Law "On State Social Insurance", which determines that the part of mandatory social contributions corresponding to 1 percentage point of mandatory contribution rates (0.5% paid by employers and 0.5% by employees) is foreseen to finance health care services. In the state budget planning process the annual fund collection is estimated and allocated to the Ministry of Health. In 2018, these funds are allocated to increase the remuneration for health care specialists. In December 2017, the Saeima adopted a Health Care Financing Law which introduces state health insurance system with two service baskets linking the right to receive a basket of full health care services with the payment of social contributions. State health insurance system with two service baskets (a full and a minimum) will be in force starting with January 1, 2019 (see further).

Types of providers, referral systems and patient choice

The total number of practising physicians per 100 000 inhabitants (321 in 2016) is below the EU average (344) and has increased since 2005 (288). Data on the physician skill-mix indicates that the number of GPs per 100 000 inhabitants (72 in 2016) is below the EU average (78.3) although it registered a steady increase since 2003 (45) as part of the authorities' effort to improve primary care provision. The number of nurses (463.6 in 2016) per 100 000 inhabitants is far below the EU average (833 in 2015).

Latvia has 340 hospital beds (2016) per 100 000 inhabitants (down from 543 in 2003), below to the EU (EU average of 402 in 2015).

The General Practitioner (GP) acts as a main point of entry into the health care system and as a gatekeeper to secondary ambulatory and hospital care. In order to receive the state financed secondary ambulatory or hospital care the referral from GP or other doctor is required. The referral to receive state financed health care services can be issued by doctors who are contracted with NHS. However, there are numerous direct access specialists to whom no referral is required (gynaecologists, ophthalmologists, paediatricians, child surgeons, dentists). Also patients with certain disease may go directly to the relevant specialists. No referral is needed to attend the endocrinologist in case of diabetes, psychiatrist in case of psychiatric disease, oncologist and oncologist-chemotherapist in case of oncological disease, pneumomologist in case of tuberculosis, dermatologist in case of sexually transmitted disease, infectologist in case of HIV, narcologist in case of an alcohol, narcotic or psychotropic substance addiction. No referral is required also in case of emergency medical assistance.

The patient has the right to choose a physician and health care institution. The patient has a right to freely register with a chosen GP and may freely change and register with a new GP.

Treatment options, covered health services

Services included in the statutory provision are defined by law. The statutory health care system covers only services provided by physicians and institutions that have contractual agreements with the NHS.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

The NHS acts as the main purchaser of health care for the population, directly commissioning both public and private providers (including GPs, dentists and hospitals). In 2016, it held contracts with 1322 GPs and 41 hospitals.

Large tertiary and specialised hospitals are owned by the state, whereas smaller and regional hospitals tend to be owned by municipalities. GPs and those medical specialists not working for hospitals or health centres tend to work as self-employed private providers.

To increase the efficiency of the use of funding allocated to health care, improve the quality of services and increase competition between health care service providers, since 2017 service providers in certain service areas are selected using a strategic procurement procedure according to set criteria. This selection process is implemented for the following groups of services: planned inpatient cancer treatment (surgery, radiation, chemotherapy); out-patient mammography; medical fertilisation; and rehabilitation. To strengthen the competencies of the personnel of the Ministry of Health and NHS in the field of strategic procurement a training seminar supported by EC Structural Reform Support Service (SRSS) was held in 2017.

The market for pharmaceutical products

Total pharmaceutical expenditure, at 1.6% of GDP, above the EU average of 1.4%. However, public pharmaceutical expenditure at 0.5% of GDP is far below the 1% EU average. This difference reflects partly the level of co-payments in the pharmaceutical sector.

Legislation and policies in the field of pharmaceuticals are the responsibility of the Department of Pharmacy of the Ministry of Health. In addition, there are two main institutions concerned with regulation of pharmaceuticals: the SAM (State agency of Medicines) and the NHS, which is responsible for reimbursement and pricing decisions.

There is a positive list in accordance with the Regulations of the Cabinet of Ministers Nr.899 "Procedures for the Reimbursement of Expenditures for the Acquisition of Medicinal Products and Medicinal Devices Intended for Outpatient Medical Treatment" (31.10.2006), designating a range of conditions (for example, diabetes, cancer, mental disorders) for which drugs are reimbursed according to the degree of severity. The objective is to keep expanding the positive list as well as to reduce the level of co-insurance required from patients. Patients pay the full price for a significant share of prescribed pharmaceuticals and the full price of all non-prescription drugs in the outpatient sector. In fact, about more than 60% of out of pocket (OOP) payments in Latvia are spent on pharmaceuticals and about 50% of these are related to payments for

non-reimbursable prescription drugs or OTC drugs. Inpatient pharmaceutical care is provided free of charge as the costs are included in the cost of inpatient services.

There is a co-payment of €0.71 per prescription for outpatient pharmaceuticals on the positive list (if the pharmaceutical has 100% reimbursement level) and co-insurance of 25% (if the pharmaceutical has 75% reimbursement level) or 50% (if the pharmaceutical has 50% reimbursement level). However, households with an income below €128 per family member per month, as well children (up to the age of 18) and asylum seekers are exempted from user charges.

Reference price system is in place in Latvia. The pharmaceuticals with the same therapeutic efficacy are grouped in clusters taking into account the presentation form and dosage. The reference price is the price of the cheapest medicine in the cluster. If more expensive medicine is prescribed, the patient has to pay the difference between the actual price of a pharmaceutical and the reference price. To promote generic competition and the use of cheapest products, for newly diagnosed patients only International Nonproprietary Name (not a specific product) can be prescribed by a doctor and the pharmacy has a duty to dispense the cheapest reimbursable medicinal products, which conform to this name, the prescribed pharmaceutical form and strength.

Pharmaceutical products are supplied to the public by a regulated distribution system consisting of licensed enterprises that manufacture and/or distribute them. In 2018, there were 86 licensed wholesalers and 32 licensed manufacturers of medicines and 7 registered manufacturers of active pharmaceutical substances in Latvia (State Agency of Medicines of Latvia, 2018).

Wholesalers are private enterprises. The total wholesale turnover of pharmaceuticals (excluding sales among wholesalers) is €398.12 million. Domestic production accounts for about 4.3% of the pharmaceutical market. However, Latvian manufacturers export most of their pharmaceutical products. Foreign manufacturers operate through representative offices, subsidiaries or limited liability companies. Some of them perform only promotion and marketing activities, while others

have established companies and are licensed as wholesalers.

Hospitals purchase medicines from wholesalers or pharmacies. Large purchases of pharmaceuticals are put out to tender.

Nearly all community pharmacies are privately owned, pharmacies can be run by a pharmacist as a pharmaceutical practice, by a company or a local community government. If it is registered as a company, at least 50% of the shares have to be owned by a pharmacist or at least half the board must consist of certified pharmacists. In fact, the pharmacy market is dominated by five chains, with the most important chain being "AS Sentor Farm Aptiekas", which draws up 33% from common pharmacies turnover. A small number of pharmacies exist at health care institutions (hospital pharmacies) and, in rural areas, under certain conditions determined by Pharmacy law, pharmacies can also be owned by pharmacy assistants.

E-Health, Electronic Health Record

The NHS is responsible for the implementation of the e-health policy and the establishment of the necessary infrastructure. Financial resources for these tasks are provided by the Ministry of Health, but certain specific projects are financed by the EU.

In the framework of the first and second round e-health projects which were finalised accordingly in the end of 2015 the following e-health information systems are developed – e-health integration platform information system (IS), e-booking IS, e-referral IS, electronic health record IS, e-prescription IS, as well an e-health portal (www.eveseliba.gov.lv). The publicly available part of the e-health portal provides the actual information about health care in Latvia, as well information about health prevention and other related topics. The authorised part of the e-health portal provides the easy access for inhabitants to their health data but for health care professionals - a virtual workplace. The publicly available part of the e-health portal is open since June 2016. Since September 12, 2016 the authorised part of the e-health portal is available.

On 11 March 2014 Cabinet of Ministers accepted the Regulations No. 134 "Regulations Regarding Unified Electronic Information System of the Health Sector", which determine the manager of the unified electronic health information system (hereinafter – E-health system), the data stored in the E-health system and the data processing procedures as well as the procedures for the issuing of data. As it is stated in the Regulations No. 134 all health care institutions are obliged to use e- prescription (for pharmaceutical products fully or partly compensated / reimbursed by state) and e- sick lists since 1 January 2018, but pharmacies are obliged to accept e-prescription already since December 2016. In accordance with the regulations No.134 the e-health system is providing the centralised processing of person's health-related data necessary for medical treatment, the preparation of e-prescriptions, the preparation of sick lists, e-booking and e-referrals etc. E-health system collects and stores the medical data of the patients regarding diagnoses, prescribed medications, carried out examinations and operations, sick-leave, disability and vaccination. All mentioned data is collected during doctor visits and stored in national data base, it will provide potentially valuable information for the health care professionals about their patients, allowing seeing the patients' health status and history results, which is important for making decision for future health treatment plan, thus improving quality of care.

Health professionals (doctors) can view and add the patient's health data (diagnoses, allergies, administered medicines, etc.); prescribe e-prescription and e- sick leave; create an e-referral to the specialist or diagnostic test; create results after consultation; describe the diagnostic tests; see another doctor created e-referrals and the results (findings); look at the results of diagnostic tests; see the vaccination data; deny patients right to view certain medical data; make several reports etc.

Health professionals (pharmacists) can issue prescribed medicaments, as well as make several reports.

The following information are available to the patients after authorising in E-health system: personal data (address, phone no., E-mail); GPs data; data on the EHIC (European Health

Insurance Card); basic health data (diagnoses and allergies, the most commonly used drugs etc.); prescribed and issued e-prescriptions; issued and closed e-sick-leave; referrals for consultations and examinations; medical findings (results); diagnostic test results; vaccination data etc.

The patients can access this medical documentation and also manage (grant/refuse) access to all/part of their health data to health professionals; mandate other (non-health professional) people (relatives etc.) enabling to act on behalf of the patient; check the audit logs (every step and access is recorded); request E-consultation from the health professional; add personal contact information, insurance data etc.

All functionality developed during first and second round of e-health projects is available for health care institutions, pharmacies and inhabitants, and NHS is continuing the development of E-health system offering wider range of services/functionalities / documents. Some of E-health system services are available also through state's e-services portal ⁽²³⁶⁾.

E-health user support service is available every day from 8:00 to 20:00 which helps to solve relevant issues related to e-health portal and the use of available functionalities. There are two support phone lines - one for citizens and other for professionals.

In August 2017, the Cabinet of Ministers approved the objectives and activities of the next two e-health system development projects: (1) modernisation, development and integration of the health information systems (registers) with the e-health information system; (2) further Development of the E-health Information System, linking it with personal identification. Projects will be co-financed by EU funds.

⁽²³⁶⁾ www.latvija.lv.

Health and health-system information and reporting mechanisms/ Use of Health Technology Assessments and cost-benefit analysis

The main performer and coordinator of the official statistical work in Latvia is the Central Statistical Bureau (CSB). The CSB is a direct administration body subordinated to the Ministry of Economics and is responsible for organisation of the statistical work and authenticity of the data it has produced by summarising the information obtained from respondents.

There are two main institutions responsible for the collection of health-related information in Latvia: the Centre for Disease Prevention and Control (CDPC) and the NHS.

CDPC is the central institution responsible for collecting and summarising health related data in Latvia. CDPC is responsible for numerous information systems and databases where health data are collected (for example, HIV/AIDS Case Register, The Newborn Register, The Register of Patients Suffering from Diabetes, Malignant Neoplasms, Occupational Diseases, Congenital Anomalies, Injuries, Psychiatric Disorders, Tuberculosis, Multiple Sclerosis and Addiction, Hepatitis C, Death Cause Database of Latvian Inhabitants, National Infectious Disease Surveillance and Monitoring System etc.). The data which is collected in the named information systems is defined by law and is submitted to CDPC by health care institutions or reported by health care practitioners and microbiology laboratories (cases of infectious diseases). All health care institutions in Latvia have a legal obligation to submit the relevant patient health data to CDPC. Data from the register of Patients Suffering from Diabetes, Malignant Neoplasms, Occupational Diseases, Congenital Anomalies, Injuries, Psychiatric Disorders, Tuberculosis, Multiple Sclerosis and Addiction, are available in E-health system as well. In accordance with the regulatory framework in the field of health statistics all health care institutions in Latvia are also obliged to prepare and submit to CDPC the annual statistical overviews about delivered health care services.

The NHS collects the data related to the use of NHS paid health services. All contracted providers

irrespective of their ownership status have to electronically submit patient information about NHS paid services for payment purposes.

Data on occupational accidents is collected by the State Labour Inspectorate. In accordance with the Regulation of the Cabinet of Ministers No. 468 “The Approval of Medical Technologies and the Implementation of New Technologies” (28.06.2005) the NHS is responsible for assessing and approving medical technologies. NHS is also responsible for registering the approved medical technologies and maintaining the database of approved medical technologies.

In order to utilise a new medical technology, a health care institution, medical practitioner or medical personnel professional organisation is required to provide a package of documents including: a technical description of the new technology; a summary of published studies documenting the effectiveness of the technology; the justification of the need for the new medical technology (aims and the provisional results), the necessary qualifications of the medical practitioners who will use the technology; a description of the space within the treatment institution in which the technology will be used.

Every new technology is then assessed by the NHS with regard to safety aspects (risks and potential side-effects), potential impact and efficiency, an assessment of the influence of the technology on the patient’s health and quality of life, professional ethics. About 50 to 60 evaluations of new technologies are conducted each year according to a methodology that is specified in the above-mentioned regulations. A positive assessment is a prerequisite for the introduction of a new technology in Latvia.

Since 2002, every new medicine is evaluated according to the Guidelines on Economic Evaluation of Pharmaceuticals (approved by regulations of the Cabinet of Ministers No.899) prior to being entered into the positive list of NHS paid medicines.

Health promotion and disease prevention policies

Total (0.12%) and public (0.11%) expenditure on prevention and public health as a % of GDP is far

lower than the EU average (respectively 0.31% and 0.25% in 2015).

Public health is coordinated by the Ministry of Health. Activities are planned and monitored mostly by CDPC, which is the main institution for infectious and non-infectious disease surveillance, control and prevention and which coordinates collection of all health-related information. The CDPC engages in health promotion and implementation of the State Immunisation Policy. State paid immunisation is provided by GPs, paediatricians and hospitals and financed through the NHS.

The implementation of health promotion and disease prevention measures funded by the EU funds (of a total amount of 55,4 million euros) has been launched. National level health promotion and prevention measures are implementing by the Ministry of Health in cooperation with subordinate institutions. 96 project applications for local level health promotion and prevention measures have been approved and gradually are launching in local community.

Recently legislated and/or planned policy reform

Recent policy response

In order to reduce inequalities in health and health care by ensuring the sustainability of health care system financing, accessibility, quality and effectiveness of health care services, the health reform has been determined as a health priority in Government Action Plan. Health reform includes a change of model of financing, strategic procurement (incl. service basket), agreement control (quality, standards), review of functions of sectoral governmental bodies. Implementation of health reform will promote the increase of health sector budget.

The Ministry of Health on the basis of World Bank recommendations developed the conceptual report “On the Health System Reform” (adopted on 25 July, 2017), which determined the distribution of state funded inpatient health care providers (hospitals) by service levels (I, II, III and IV hospitals), providers of emergency medical treatment services, setting the ground for development of primary health care and also

highlighted the need for the development of cooperation areas for providers of inpatient health care services. It also included plans to improve remuneration of the medical staff and further development of the human resources, as well as defining the role of municipalities in the health care system, improve purchasing process of state funded health care services and the reorganisation of the subordinate institutions of the Ministry of Health. The reform will also introduce a quality improvement and patient safety system, and ensure linking the register of healthcare recipients with tax payment information on contributions made in Latvia through e-health solutions.

In 2017 €34.3 million were granted for the health care system reform from the budget deficit deviation allowed by the European Commission. This funding was used: 1) to decrease the waiting times to out-patient health care services, including out-patient rehabilitation services, and day hospital services; 2) to improve the accessibility to the diagnostics and treatment of the malignant tumours; 3) to provide the reimbursable drugs for the treatment of hepatitis C (for patients having F3-F4 stage of the illness).

To continue these measures and improve access to healthcare services, at the end of 2017 an Informative report ⁽²³⁷⁾ was adopted. It foresees further measures in amount of €13.4 million in 2018: 1) to improve accessibility of health care services; 2) to improve accessibility of oncological diseases diagnosis and treatment; 3) to reduce the spread of infectious diseases, including Hepatitis C and HIV infection treatment; 4) to improve the accessibility and quality of primary health care system; 5) to decrease the morbidity rates with cardiovascular diseases and to improve the effectiveness of the treatment.

From January 2018, new health care services are covered by the state budget: transcatheter aortic valve implantation and liver transplantation for adults, positron emission tomography services for patient with certain oncological diagnosis (PET services from 01.07.2018). As well the provision of diagnostics and consultation for patients with rare disease was improved by introducing the specialised Rare Disease Coordination Center, at

⁽²³⁷⁾ Informative report "On implementation of health reform measures in 2018", 19.12.2017.

the Children's Clinical University Hospital. Diabetes patients' care was improved by introducing services of training cabinet.

One of the priorities of the Ministry of Health is to tackle difficulties in recruitment and retention of staff due to low remuneration, particularly for the middle and lower level personnel. Increases in pay will continue to be considered relative to the available space in the health sector budget.

From January 2017 the minimal monthly wage was increased, and the lowest wages were equalised, as well there as ensuring that overtime working is limited to a maximum average of 16 hours in a seven-day period for medical personnel and emergency medical care assistance staff, which is not medical personnel, by allocating additional funding.

In 2018, additional financing of €85.3 million was attracted to increase remuneration of medical personnel and other workers in health care sector, as a result percentage increase in wages for doctors and functional specialists is foreseen by 44%, for medical and patient care persons and functional specialists' assistants by 38%, but for medical and patient care support persons by 24%. The wages of medical personnel working in inpatient institutions will increase more significantly due to the mandatory premium when working twenty-four hour periods and the gradual refusal from extended normal working time.

In order to tackle the lack of medical personnel in regions outside Riga, measures have been funded from the EU funds 2014-2020 planning period. There are other measures financed by EU funds such as providing medical personnel with the opportunity to increase their qualifications and opportunities for non-practitioners in their speciality to return to the labour market.

EU funds for the 2014-2020 planning period also provide support for the development of GP practice, including both the renovation of premises and the purchase of equipment. Support will be provided for around 600 GPs' practices with a budget of €4.5 million. It is intended to provide support not only to individual practices but also to promote the development of cooperation practices to ensure more effective use of resources and improve access to primary health care. The process

of development and harmonisation of the support conditions is currently under way, while the implementation of the projects is envisaged to start in early 2019.

There are also projects financed by EU funds to invest in infrastructure for tertiary health care and regional hospitals, as well as for mono-profile hospitals providing rehabilitation, maternity care and traumatology services. In 2018, the Cabinet regulations on implementation conditions for investments of EU funds in infrastructure for local hospitals (I, II, III level hospitals) were approved and project implementation will begin by the end of 2018.

A large number of measures have been launched to improve patient safety. Accordingly, since October 2017 each medical institution must follow guidelines including: 1) improve patient identification (throughout the treatment process using at least two identifiers); 2) facilitate effective communication between patient and health care professionals, 3) provide risk-reduction measures for surgery, anaesthesiologic procedures, as well as for high risk patients or groups of patients related to the age, medical condition and need for special care; 4) establish and maintain the blame-free reporting and learning system on adverse events; 5) introduce and maintain a safe drug circulation system in accordance with the regulatory enactments regarding the procedure for the acquisition, storage, use, recording and destruction of medicinal products in medical institutions and social care institutions and 6) introduce and maintain a system for patient complaints and suggestions analysis.

There was also an update of the requirements for the care during pregnancy, delivery and postnatal period, as well as the procedures for new-borns, in order to ensure the quality of service.

Simultaneously, the Ministry of Health developed and approved in January 2017 the Concept for the Health Care system's quality improvement and patient safety to improve these aspects, as well as to create a common understanding of them. Within the framework of the Concept are activities co-financed by the EU Social Fund, such as targeted medical staff training for patient safety. Significant work has begun to develop clinical algorithms and

patient pathways, which is critical for providing high-quality and efficient health care services. Starting from 2018, clinical guidelines and medical technologies in use are evaluated and updated using available international comparisons as well as performance indicators for the priority health areas (cardiovascular, oncological diseases, mental health, perinatal care, children (from the neonatal period) care).

The Patient Safety and Healthcare Quality Improvement Unit has been set up at the CDPC to provide supporting functions for medical institutions in patient safety and quality of health care area.

The NHS is working on the development of the Nord-DRG activity-based accounting system in hospitals. The use of DRGs has the potential to increase transparency in the inpatient sector, both concerning performance (as it will allow evaluating the complexity of patients treated in different institutions) and resource allocation (as resources will be allocated according to the number and type of patients treated).

In order to change public attitude towards health and improve their health behaviours and status, a number of changes in laws and regulations have been implemented. The aim is to limit consumption of unhealthy products and habits, through regulations on restriction of trans-fatty acid amounts in food products, as well as the regulations ensuring availability of healthy food in educational institutions, treatment institutions and social care and social rehabilitation institutions. In August 2018, amendments to the regulation were approved and new nutritional norms were defined, with the addition of more vegetables, fruits and milk products. In 2016 parliament adopted the law on the Handling of Energy drinks, which prohibits to sell energy drinks to persons under the age of 18. Since 2000 Latvia has an excise tax on non-alcoholic beverages and the tax rate has been increased two times.

The National Network of Healthy Cities. The aim of the Network aims to improve the municipal employees' knowledge on public health and health promotion, to promote the local governments' involvement in the health promotion, to promote the exchange of the knowledge and good practice among local municipalities and to provide the

methodological support for local governments on public health and health prevention issues. Currently there are 112 municipalities participating in the Network (94% of municipalities in Latvia) (data from 2018).

The Plan for improving health care services in oncology for years 2017-2020 was adopted in 2017 and aims to improve primary diagnostic and treatment of the most frequent oncologic diseases, quality and responsiveness of cancer screening and access of palliative care. The Plan includes the measures to decrease risk factors of oncologic diseases, coordination and surveillance of cancer screening, to improve early diagnostic, treatment and post-treatment observation as well as to improve services of medical rehabilitation and palliative care.

In October 2017, the Action Plan for the Elimination of HIV Infection, Sexually Transmitted Infections and Hepatitis B and C for 2018-2020 was adopted with the aim of limiting the spread of these conditions.

In October 2017, the Plan of Rare diseases for years 2017-2020 was adopted. It includes priority tasks and measures to improve early and timely diagnosis of rare diseases and their treatment as well as information of rare diseases.

In June 2018, The Maternal and Child Health Improvement Plan for years 2018 – 2020 was adopted. The aim is to do this through activities of health promotion and disease prevention as well as promote early diagnosis, timely treatment and medical rehabilitation.

A new order to improve cardiovascular disease (CVD) prevention is introduced since July 2018, providing additional prophylactic examinations for adults at a certain age (at 40, 45, 50, 55, 60 or 65 years age). CVD prevention includes cardiovascular risk assessment at GP practice, using SCORE method and necessary diagnostic tests, and certain measures according to the identified risk.

In December 2017, The Healthcare Financing Law was adopted. It states the introduction of state health insurance and two health care services' baskets: (minimum basket and full basket) from

2019. See above for a more detailed description of this policy.

Policy changes under preparation/adoption.

According to conceptual report "On the Health System Reform" there is ongoing implementation of the reform.

The Ministry of Health is developing an Action plan for the improvement of mental health for years 2019-2020. It will include issues related to the development of integrated mental health care; improvement of the knowledge, skills and competences of GPs; to promote the further education of nurses working in GPs' practice; the improvement of efficiency and quality of in-patient treatment; improvement of accessibility and quality of outpatient psychiatric health care by strengthening the practices of psychiatrists and by the creation of regional centers, where the services are provided by a multi-professional team.

To continue modernisation of the e-health system two e-health system development projects (see above) are submitted for the approval to the responsible institution.

In 2017, a project on Development of the Health System Performance Assessment (HSPA) for Slovenia and Latvia was launched with support from the EC Structural Reform Support Service and in collaboration with Sant'Anna School of Advanced Studies. This is a key part of substantial reform to improve the fiscal sustainability and the efficiency of Latvia's health system, enabling the authorities to monitor progress towards defined health system goals.

New amendments to the "Law On Handling of Tobacco Products, Herbal Products for Smoking, Electronic Smoking Devices and Their Liquids" have been prepared including display ban of tobacco products, herbal products for smoking, electronic smoking devices and their liquids (this draft has been approved by the Parliament in the 2nd reading and has been notified to the European Commission and member states).

Currently under preparation is a new national Action plan for reduction of consumption of alcoholic beverages and limitation of alcoholism for next planning period. The plan includes a

variety of activities regarding the restriction of marketing and supply of alcoholic beverages, the reduction of harmful alcohol use, treatment and rehabilitation services.

Possible future policy changes

The Ministry of Health continues to implement the health care reform as described above.

Challenges

The analysis above shows that a wide range of reforms have been implemented over the years, to a large extent successfully (e.g. the development of a strong primary care system), and which Latvia should continue to pursue. However, some policies have met with a number of obstacles and there may be room for improvements in a number of areas. The main challenges for the Latvian health care system are as follows:

- To improve, as acknowledged by the authorities, the basis for more sustainable and larger financing of health care in the future (e.g. considering additional sources of general budget funds), with a better balance between resources and demand, between the number of contributors (including general, unmarked taxes etc. contributions) and the number of beneficiaries and which can improve access and quality of care and its distribution between population groups and regional areas. If more resources are brought into the sector it is important that they do not remain fragmented but are pooled together maintaining the strong pooling mechanisms in place today.
- To define a comprehensive human resources strategy – including higher education prospects – to ensure a balanced skill-mix, avoid staff shortages and motivate and retain staff to the sector.
- To continue to enhance and better distribute primary health care services and basic specialist services to improve equity of access and the effectiveness and efficiency of health care delivery as well as ensuring effective referral systems from primary to specialist care and improving care coordination between types of care. This can be helped through developing

electronic patient records in the future and ensuring that the coverage of specialised care is extended to the whole of the population.

- To continue the efforts to make hospital budgets more prospective and costs more transparent.
- To continue to improve data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted and used to improve access, quality and sustainability of care.
- To gradually increase the use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing.
- To enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, lack of exercise, obesity). The introduction of a smoking ban accompanied by taxes on tobacco, alcohol and soft drinks, stricter regulation of tobacco advertisement and labelling as well as stricter road safety measures can contribute to improving population health status in the long run. Health education and healthy environments in various settings (school and workplaces) can also be a cheap complementary policy.

Table 2.16.1: Statistical Annex - Latvia

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	14	17	23	24	19	18	20	22	23	24	24	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	15.9	15.7	15.0	13.8	12.7	13.4	14.0	14.6	14.9	15.4	16.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	11.9	12.9	10.9	-2.5	-13.0	-1.9	8.4	5.3	3.5	2.8	3.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	14.5	18.9	-10.0	-5.7	-3.5	-0.5	13.4	-9.6	5.3	7.8	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	6.2	6.3	6.8	6.2	6.8	6.6	6.1	6.6	5.7	5.9	6.1	10.2	10.1	10.1	10.2
Total current as % of GDP	5.8	5.5	6.2	5.9	5.7	5.8	5.6	6.2	5.4	5.5	5.7	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.4	0.8	0.5	0.4	1.0	0.9	0.5	0.4	0.3	0.4	0.4	0.9	0.6	0.2	0.3
Total per capita PPS	600	773	1,098	1,097	928	883	942	1,124	1,028	1,102	1,185	2,745	2,895	2,975	3,305
Public total as % of GDP	3.9	4.3	4.2	3.9	4.2	3.9	3.8	3.7	3.6	3.7	3.7	8.0	7.8	7.8	8.0
Public current as % of GDP	3.5	3.8	3.6	3.6	3.7	3.6	3.5	3.3	3.2	3.3	3.3	7.7	7.6	7.6	7.8
Public total per capita PPS	378	527	677	687	571	523	585	631	641	685	709	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.44	0.49	0.52	0.29	0.44	0.37	0.25	0.42	0.34	0.39	0.40	0.2	0.2	0.2	0.2
Public as % total expenditure on health	63.0	68.2	61.6	62.6	61.5	59.2	62.1	56.1	62.4	62.1	59.8	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	16.6	14.7	13.7	9.5	9.1	10.4	10.9	10.2	10.6	10.1	10.2	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	:	100.0	100.0	:	:	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	41.7	35.6	39.3	37.3	38.8	37.8	32.1	34.4	38.5	39.1	42.1	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	502.1	503.0	505.2	508.5
Life expectancy at birth for females	76.3	76.1	76.2	77.5	77.7	78.0	78.8	78.9	78.9	79.4	79.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	64.9	65.0	65.3	66.5	67.5	67.9	68.6	68.9	69.3	69.1	69.7	76.6	77.3	77.7	77.9
Healthy life years at birth females	53.2	52.5	54.8	54.3	56.0	56.4	56.6	59.0	54.2	55.3	54.1	62.0	62.1	61.5	63.3
Healthy life years at birth males	50.8	50.8	51.4	51.6	52.6	53.1	53.6	54.6	51.7	51.5	51.8	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	199	185	168	154	144	145	371	357	353	332	326	64	138	131	127
Infant mortality rate per 1 000 live births	7.7	7.4	8.5	6.6	7.6	5.6	6.6	6.3	4.4	3.8	4.1	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics															
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.9	1.8	2.0	1.7	2.0	1.7	1.4	1.3	1.3	1.2	1.2	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.3	0.4	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.5	1.3	0.9	1.5	1.3	1.2	1.0	1.1	1.0	1.2	1.2	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.4	1.4	1.7	1.3	1.5	1.6	1.5	1.4	1.4	1.5	1.6	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.4	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.0	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.0	0.1	0.12	0.27	0.23	0.30	0.31
Health administration and health insurance	0.2	0.2	0.3	0.2	0.2	0.2	:	:	:	0.1	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.3	1.3	1.6	1.4	1.6	1.3	1.1	1.0	1.0	1.0	1.0	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.1	0.1	0.1	0.1	0.2	:	:	:	0.2	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.6	0.7	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.5	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.4	0.5	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Prevention and public health services	0.0	0.17	0.10	0.09	0.19	0.14	0.18	0.16	0.04	0.11	0.11	0.23	0.19	0.25	0.25
Health administration and health insurance	0.4	0.4	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.16.2: Statistical Annex - continued - Latvia

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	32.1%	33.0%	31.5%	29.7%	34.2%	29.6%	24.5%	21.0%	23.8%	21.4%	21.1%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	0.7%	1.3%	1.3%	1.5%	1.7%	4.0%	4.6%	4.7%	6.9%	6.2%	6.5%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	25.3%	24.0%	14.3%	25.4%	22.0%	20.3%	17.8%	17.3%	18.5%	21.6%	21.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	24.3%	26.2%	26.5%	22.0%	26.5%	27.0%	25.8%	22.5%	26.3%	26.9%	27.7%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	7.1%	3.1%	6.6%	2.9%	4.7%	3.6%	3.7%	3.3%	3.6%	3.1%	2.8%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	0.3%	3.5%	1.6%	1.5%	3.3%	2.4%	3.3%	2.5%	0.7%	2.0%	2.1%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	2.9%	3.6%	4.0%	2.9%	3.7%	3.3%	:	:	:	1.6%	1.9%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	38.6%	34.9%	44.5%	39.3%	43.0%	36.2%	30.3%	30.2%	32.0%	29.4%	30.5%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	1.2%	1.6%	1.6%	1.7%	2.2%	5.3%	:	:	:	5.8%	5.8%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	18.4%	17.1%	9.9%	14.1%	14.0%	17.1%	16.1%	15.7%	16.0%	17.5%	15.4%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	12.7%	12.3%	12.1%	13.6%	14.8%	16.9%	16.8%	16.9%	16.3%	16.0%	16.6%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	0.3%	0.0%	0.3%	0.0%	1.3%	0.0%	0.5%	0.6%	0.5%	0.9%	0.6%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	0.3%	4.5%	2.7%	2.5%	5.1%	3.9%	5.1%	4.7%	1.2%	3.4%	3.4%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	10.7%	9.7%	6.6%	8.9%	3.5%	3.9%	3.6%	3.1%	3.0%	1.8%	2.8%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.26	0.26	0.48	0.66	0.71	0.79	0.92	0.98	1.04	1.25	1.26	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.1	0.2	0.3	0.3	0.4	0.6	0.5	0.6	0.7	0.6	0.6	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.8	1.8	2.1	2.3	2.4	2.8	3.1	3.2	3.5	3.6	3.7	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	15.6	:	18.5	:	15.5	:	17.5	:	20.8	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	30.4	:	27.9	:	:	:	:	:	24.1	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	9.9	10.4	12.1	11.8	9.9	9.8	10.1	10.2	10.4	10.6	10.8	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	288	294	304	311	299	302	314	314	319	322	320	324	330	338	344
Practising nurses per 100 000 inhabitants	487	544	535	534	465	486	496	486	488	482	468	837	835	825	833
General practitioners per 100 000 inhabitants	58	59	60	61	61	63	64	66	67	70	70	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	5.3	5.6	6.0	6.2	5.9	5.9	6.3	7.0	6.2	5.8	5.9	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	21	21	21	20	18	15	18	17	17	16	:	17	16	16	16
Day cases discharges per 100 000 inhabitants	:	:	:	528	:	:	6,791	7,198	7,341	7,185	:	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	74.0	76.0	76.1	75.5	64.0	71.1	70.4	68.1	68.0	69.7	70.7	77.1	76.4	76.5	76.8
Hospital average length of stay	7.4	7.2	9.4	9.5	8.5	8.5	8.4	8.3	8.3	8.3	8.3	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	10.6	:	:	2.5	:	:	27.9	29.3	29.9	31.1	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	3.7	3.9	4.1	4.2	4.3	4.4	4.4	4.5	4.5	4.4	4.4	4.3	Latvia	EU	
AWG risk scenario	3.7	4.1	4.5	4.8	5.1	5.3	5.5	5.6	5.6	5.6	5.6	5.5	0.6	0.9	
Note: *Excluding expenditure on medical long-term care component.													1.8	1.6	
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	2.0	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.5	1.4	1.4	1.3	Latvia	EU	
													-31.8	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.17. LITHUANIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

GDP per capita in PPS, at 19,600 PPS per capita is below the EU average GDP per capita of EUR 29,600 in 2015. Lithuania has a population of around 2.9 million inhabitants. Over the coming decades, the population of Lithuania will gradually decline, from 2.9 million inhabitants in 2016 to 1.7 million inhabitants in 2070. This 40% fall is very different from the EU average increase of 2%.

Total and public expenditure on health as % of GDP

Total expenditure ⁽²³⁸⁾ on health as a percentage of GDP (6.8% in 2015) is below the EU average ⁽²³⁹⁾ of 10.2%. Public expenditure is, at 4.7% of GDP, far below the average of 8% in 2015. Looking at health care without long-term care⁽²⁴⁰⁾ reveals a smaller gap with the EU average (4.1% vs 6.8% in 2015).

When expressed in per capita terms, total spending on health at 1488 PPS in Lithuania is below the EU average of 3305 in 2015. So is public spending on health care: 1020 PPS vs. an EU average of 2609 PPS in 2015.

Expenditure projections

As a consequence of demographic changes, health care expenditure is projected to increase by 0.4 pps of GDP, below the average growth expected for the EU (0.9) ⁽²⁴¹⁾, according to the Reference Scenario. When taking into account the impact of

non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.2 pps of GDP from now until 2070 (EU1.6).

Overall, Lithuania presents low fiscal risks ⁽²⁴²⁾.

Health status

Life expectancy at birth (79.7 years for women and 69.2 years for men in 2015) is far below the respective EU averages (83.3 and 77.9 years of life expectancy) ⁽²⁴³⁾. Healthy life years, at 58.8 years for women and 54.1 for men, are below the EU averages of 63.3 and 62.6 in 2015. The infant mortality rate of 4.2‰ is above the EU average of 3.6‰ in 2015).

As for the lifestyle of the Lithuanian population, there is a proportion of regular smokers of 20.4% in 2014 higher than the EU average of 20.9% in 2014. Alcohol consumption is, at 15.2%, higher than the EU average of 10.2% in 2015 according to Eurostat. The Lithuanian Statistical authorities report a continuous fall in alcohol consumption from 14.5% in 2013 to 13.2% in 2016.

System characteristics

Coverage

Compulsory statutory health insurance, based on compulsory insurance contributions, plus transfers from the State budget, provide health care coverage to approximately 98-99% of the resident population. The National Health Insurance Fund (NHIF) and its regional branches, the Territorial Health Insurance Funds (THIFs), contract with care providers for the provision of services and reimburse the insured for medicines. The set of (mostly public) services organised at municipal, county and national level constitute the Lithuanian National Health Systems (LNHS). The services included in the statutory provision are defined by law. This is broad definition which is further detailed by decrees of the Minister of Health and by contracts among THIFs and providers. The

⁽²³⁸⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽²³⁹⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽²⁴⁰⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽²⁴¹⁾ I.e. considering the "reference scenario" of the projections (see The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf).

⁽²⁴²⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽²⁴³⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

definition of benefit package is not revised annually.

Free emergency care is provided to the all permanent residents. Most of the other services are also free for insured people, but if patients want to have higher service standard or additional services not covered by compulsory health insurance they have to pay to different extents. Cost-sharing applies to some services: for instance, the majority of pharmaceuticals and dental services.

The share of private expenditure on health in total health expenditure (31.4% in 2015) is far higher than the EU average (21.6). Out-of-pocket expenditure constitutes about 32.1% of total health expenditure, well above the EU average (15.9% in 2015).

There are several cost-sharing exemptions: 19 categories of population are exempted from payment of compulsory health insurance contributions as they are insured by the government. In 2015, the number of such persons was 1.64 million (almost 56% of the total population). There are also two groups of people to whom a ceiling is applied:

1. various groups of self-employed people on the income calculated on the sum which does not exceed the sum of 48 amounts of the taxable income approved by the government of the Republic of Lithuania for the current year;
2. people on the income from individual agricultural activities of the natural persons, who engage in that type of individual activities, for whom contributions are being calculated on a sum which does not exceed the sum of 12 amounts of the taxable income.

In addition to formal payments, informal (non-official) payments are still reported. These do not encourage a more effective use of services and constitute an additional barrier to access as there are no exemptions for low income or high risk groups.

Administrative organisation and revenue collection mechanism

The NHIF allocates the budget to the THIFs according to a formula based on the number of

residents in each county, their age and gender. As it stands, it may be worth exploring if additional gains can be achieved through resource reallocation across the country to improve the geographic distribution of care (there appears to be an overconcentration of services in richer and urban areas and underfunding in other parts of the country). The THIFs then establish contractual arrangements with service providers.

Expenditure under the Compulsory health insurance fund is constrained by the sums approved by the Law on the Approval of Financial Indicators of the budget of CHIF. The budget of the CHIF is balanced out within a year. Once a month, the accounts for the provided health care services and dispensed medicines and minor medical aid equipment subject to compensation are being submitted by the health care institutions and pharmacies to the THIF wherewith it has concluded a contract. Under the conditions of the contracts, without exceeding the approved appropriations of the budget of the NHIF and not later than within 30 days from the receipt of a bill, the THIFs must settle the accounts submitted by the individual health care institutions and pharmacies wherewith the said funds have concluded contracts.

Types of providers, referral systems and patient choice

Primary care is provided by general practitioners (GPs) or GP teams, consisting of a district internist or district paediatrician together with a surgeon and an obstetrician-gynaecologist, nurses and other staff. Services are provided in primary care health centres or GPs private offices, community posts, ambulatories and polyclinics around the country. Specialist ambulatory care is provided in polyclinics and hospital outpatient departments, mostly state or municipally-owned facilities, although private provision of specialist outpatient care is growing. Inpatient care is provided in general and specialised hospitals. Providers establish contracts with the THIFs. Virtually all pharmacies (except for a few) and the majority of dental practices are private. Pharmacies establish contracts with THIFs and receive reimbursement for the pharmaceuticals (included into positive list) delivered to the patients. Dental practices operate on a totally private basis. The only exception is represented by those dental practices which are

within the structure of Primary health care centres. The payment for primary dental services is included into Primary Health Care capitation rate.

The total number of practising physicians per 100 000 inhabitants (434 in 2015) is above the EU average (344) and has increased gradually since 2003. Data on the physician skill-mix indicates that the number of GPs per 100 000 inhabitants (91 in 2015), excluding district internists and district paediatrician which are working very much like GPs, is above the EU average (78.3). This is due to a high increase throughout the last two decades as part of the authorities' efforts to improve primary care provision (42.7 in 1998). The number of nurses (766 in 2015) per 100 000 inhabitants is below the EU average (833 in 2015), having remained relatively flat since 2011 (753). This may be associated with staff, particularly nurses, migrating to other EU countries that need to provide nursing care and offer better wages. This skill mix, coupled with non homogenous physician distribution is still posing some difficulties to a well-functioning primary health care sector, which is acknowledged by the authorities.

Since the early 1990s, national authorities have made a significant and, to a large extent, successful effort to enhance primary care provision, to strengthen the referral system from primary care to specialist doctors and to strengthen the gate-keeping role of GPs to reduce the unnecessary use of specialist and hospital care. This is amongst other things done through a financial incentive to visit, one's own GP as the first step; i.e. imposing an extra cost for non-referred consultations. All inhabitants have to register with a GP who acts like a family doctor and refers patients to other types of care. Patients are able to choose their health centre and their GP and choose a hospital after referral. To implement a well-functioning referral system and choice, it is necessary to continue the efforts so far to change the skill mix and improve the distribution of primary care across the country and possibly to improve access to primary care / GPs after normal office hours (although office hours are already long compared to other countries). Shortages of GPs can lead to high waiting times to visit GPs and therefore individuals skipping the referral system and going straight to hospital, making unnecessary use of (free) emergency care.

Lithuania has one of the largest numbers of acute care hospital beds per 100 000 inhabitants (608 in 2015) in the EU (EU average of 402 in 2015), although it has seen a large reduction in the last two decades (631 in 2005).

These values were perhaps a result of the efforts to modernise care facilities and improve quality of care. However, for a country spending a relative small percentage of their overall GDP on health, it may be too high a value to allocate to infrastructure. It may be worth investigating if investment in infrastructure is still necessary and to carefully consider what type of infrastructure can be cost-effective given the size of the country, the budget for health and the economic situation.

Treatment options, covered health services

Health in the statutory provision basket are broadly defined by law. This definition is made more detailed by decrees of the Minister of Health and by contracts among THIFs and their providers. The definition of the benefit package is not revised annually.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Payment systems have evolved over the years. GPs (or GP teams) receive a mix of capitation, approximately 74.5 % of total payments in 2015, according to the number and age of their listed patients (age-adjusted capitation), fees for defined activities (health promotion and disease prevention), as well as bonuses for some performance indicators (the remaining 25.5 %). This mixed system intends to render primary care more attractive and provide incentives for primary care provision including some health promotion and disease prevention activities. The authorities are considering a further enlargement of the non-capitation share of GPs' payment, and there is a set of additional performance indicators related to reduction of avoidable hospitalisations elaborated for that. Specialists are paid per consultation, consisting of up to three visits for the same reason; if the patient needs to see specialist further on – the new episode of consultation is reimbursed to the provider. Remuneration is determined by the central government (Ministry of Health).

Hospitalisation rates are still high although progress towards primary care and reducing hospital capacity has been significant. The number of hospital surgery done as day cases was 2403 day cases per 100 000 inhabitants in 2015 vs. the EU average of 7635). On the contrary, the number of inpatient discharges per 100 inhabitants was 23.1 in 2015, above the EU average of 16.2.

Hospitals are paid mostly on the basis of cost per case (450 groups of diagnosis – nationally elaborated DRGs) according to annual contracts. The decision was made to switch to Australian Refined DRG system from 2012. Implementation was delayed until 2014 due to coding problems. The hospital budgets are very stringent in terms of budget caps. However, there is flexibility to provide more short-term, day and outpatient services (so-called priority services) instead of ordinary hospitalisations.

The market for pharmaceutical products

Medicines in Lithuania are mainly imported from other EU member states. The reimbursable price is set on the basis of international prices of a selected list of countries. In order to further control overall expenditure, the authorities have implemented the following policies: a) the reimbursable price is determined on the basis of 95% of the average of manufacturer prices in reference countries CZ, EE, HU, LV, PL, SK, RO, BG and b) there is a reference price mechanism, whereby the maximum reimbursement price of a new drug is based on other drugs that have both the same active ingredient and form and according to the disease, and c) positive lists (the list of pharmaceuticals that can be reimbursed) are based as much as possible based on economic evaluation information.

Compared to the range of policies used by neighbouring countries, there is perhaps room to explore other additional measures regarding product price regulation and direct expenditure control. On 1st of April 2010, new provisions of the Amendment of Law on Pharmacy concerning the regulation of prices of non-reimbursed pharmaceuticals entered into force. The government sets the maximum wholesaler and pharmacy mark-ups for prescriptions and OTC. The representatives of manufacturers shall provide manufacturer prices for the Lithuanian market, as

well as the prices at which the pharmaceuticals are distributed in the reference countries in order to compare them.

Since 2010, a number of measures aimed to reduce expenditures on pharmaceuticals have been adopted. The new rule about the price of generic is set by the Governmental Decree. The first generic in the group shall be 50 % cheaper than original, the second 15 % cheaper than the first and the third 15 % cheaper than the second generic. In the case when the group of reimbursed medicinal products consists of more than 3 medicinal products of different manufacturers, the most expensive medicinal product can be only 10% more expensive than the average of two cheapest pharmaceuticals of the same INN in reference countries.

Since 2011, therapeutically interchangeable pharmaceuticals with different INN are clustered if they have the same therapeutic effect, indication of reimbursement, presentation form and are used for the treatment of the same age group of patients.

Since 1st of May 2010 pharmacies are obliged to show prices of pharmaceuticals to patients in a special computer monitor.

Since 1st of June, 2010 prescribing medicinal product by INN is obligatory with some exceptions set by the Minister of Health.

eHealth, Electronic Health Record

Health aims to improve the accessibility and quality of healthcare services and to ensure the necessary information exchange using the information and communication technologies.

According to the plan of the implementation of E-Health System Development Programme for 2009-2015, the Ministry of Health of the Republic of Lithuania has finished three large public investment projects: the central part of the system (ESPBI IS), e. prescription and medical image exchange. According to the Implementation Plan, during period of 2009 – 2015 29 e-health projects have been already implemented, including 16 national and 13 regional projects. Information systems of the national-level and university hospitals, Online Booking System for outpatient consultation, and registers of licenses of health

care professionals and health care institutions, and register of medicines ensuring the development of high quality electronic services of health care institutions (HCI) have been developed under the national projects. Regional projects are focused on information systems of regional medical institutions that provide data to the central e-health information system.

150 HCI have already implemented the projects of e-health development information systems and currently they provide the electronic completion of patient medical records within the scope of the project: 12 clinical forms: referrals, epicrysis, description of visits, e-prescriptions, laboratory tests, radiological image reports and etc., as well as 8 medical certificates: health certificates for students, drivers, holders of weapons, birth or death certificates, and others.

The central e-health system (ESPBI IS) is capable of storing patient information from various HCI in one e-health history (One Resident – One EHR). This makes it possible to re-use health records, to avoid duplication of diagnostics procedures and provide health care services to patients more efficiently, safer and better quality. The system will enable to carry out disease prevention and health promotion programmes more effectively based on objective records, which will be available for re-use. Patient-needs-oriented EHR aims to assure lifelong and effective provision of healthcare services in Lithuania. EHR is being developed gradually, i.e. during the first years it is carry only the critical patient health information and certain certificates. Later it will be expanded and supplemented with more detailed medical data.

Lithuania strives to involve all healthcare institutions in participation and secure data exchange, to enable successful functioning of the ESPBI IS and to create, store and transfer data about patient health even between European countries according to the principle “one resident – one EHR”.

In order to ensure a coherent policy of development of the eHealth system in Lithuania, smooth operation of health care institutions, to save the time of doctors and patients, to receive health care services of a better quality, the eHealth System Development Program for period of 2017-

2025 was approved by Order No V-878 of the Minister of Health of the Republic of Lithuania of 17 July 2017., i.e. it is aimed that all health care institutions should participate in the eHealth system in order to create conditions for all health care institutions in Lithuania to provide patient’s electronic health records from the health care institutions information systems or through the portal ⁽²⁴⁴⁾.

Health and health-system information and reporting mechanisms/ Use of Health Technology Assessments and cost-benefit analysis

Data has much improved in recent years although it is still lacking in a number of areas. Information and monitoring of physician and hospital activity can be used for example for establishing contracts and prospective budgets.

Currently there is no structure to conduct health technology assessment in great part due to the fact that it requires additional administrative capacity and scientific know-how, currently not available. Therefore, cost-effectiveness knowledge is used in a limited way to determine the benefit package, the extent of cost-sharing or develop treatment guidelines to harmonise and rationalise medical practices.

There is an HTA model developed and successfully deployed in Lithuania, which is based on the assessment of applications submitted to competent HTA bodies, responsible for assessing medical devices, medical procedures, public health technologies and medicines according to the priorities set by the Ministry of Health. The greatest priority is attributed to the technologies which have the greatest impact on morbidity, mortality and disablement.

As introduced earlier, there are indeed a number of risk factors to health that deserve attention and action. Consequently, the central government has set a number of public health objectives, some of which are very detailed and have been implemented with the help of the WHO. Currently there are six prevention programs carried out in Lithuania: Heart and vascular diseases prevention programme, Sealant program for children, Cervical

⁽²⁴⁴⁾ www.esveikata.lt.

cancer, Mammography, Colorectal cancer and Prostate cancer screening programmes.

However, total (0.13%) and public (0.13%) expenditure on prevention and public health as a share of GDP is much lower than the EU average (respectively 0.3% and 0.25% in 2015).

Recently legislated and/or planned policy reforms

In 2013 the creation of the Integrated Health Care and Functional Cluster System was started, thus seeking to start quality treatment of patients suffering from serious illnesses as soon as possible, to manage patient flows more efficiently and optimise the activities of hospitals.

In order to achieve a more effective operation of system of the national health care institutions, the next health care system development and hospital network consolidation strategic plan was approved by the Minister of Health in December 2015. The strategic plan foresees the directions and priorities of the Lithuanian national health system development and optimisation.

Challenges

The analysis above shows that a wide range of reforms have been implemented over the years, to a large extent successfully (e.g. the development of a strong primary care system), and which Lithuania should continue to pursue. However, some policies have met with a number of obstacles and there may be room for improvements in a number of areas. The main challenges for the Lithuanian health care system are as follows:

- To improve, as acknowledge by the authorities, the basis for more sustainable and larger financing of health care in the future (e.g. considering additional sources of general budget funds), with a better balance between resources and demand, between the number of contributors and the number of beneficiaries and which can improve access and quality of care and its distribution between population groups and regional areas. If more resources are brought into the sector it is important that they do not remain fragmented but are pooled together maintaining the strong pooling mechanisms in place today.
- To continue to enhance and better distribute primary health care services and basic specialist services to improve equity of access and the effectiveness and efficiency of health care delivery as well as ensuring effective referral systems from primary to specialist care and improving care coordination between types of care. This can be helped through developing electronic patient records in the future.
- To continue the efforts to decrease hospital beds while increasing day-case surgery and concentrating high-tech hospital services.
- To implement a comprehensive human resources strategy to ensure a balanced skill-mix, avoid staff shortages and motivate and retain staff to the sector, especially in view of migration and ageing.
- To consider additional measures regarding price regulation and direct expenditure control, including incentives for good prescribing practices and a more explicit policy on generics and the monitoring of prescription of drugs.
- To continue to improve data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted and use to continuously improve access, quality and sustainability of care.
- To gradually increase the use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing.
- On the basis of the defined public health priorities, continue to enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, lack of exercise, obesity) as detailed in the national plan, including the smoking ban and health education in schools and communities. Taxes on tobacco, alcohol and soft drinks, stricter regulation of tobacco advertisement and labelling as well as stricter road safety measures and bicycle lanes and greener areas are some of the measures that can encourage healthier life-styles.

Table 2.17.1: Statistical Annex - Lithuania

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	21	24	29	33	27	28	31	33	35	37	37	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	15.5	16.1	17.1	16.2	14.1	15.4	16.4	17.2	17.9	18.8	19.6	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	9.5	9.1	12.4	3.7	-13.9	3.8	8.5	5.2	4.6	4.4	3.0	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	16.0	12.8	10.2	-1.9	-2.3	5.0	2.3	3.3	3.8	7.5	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	5.8	6.2	6.2	6.6	7.5	7.1	6.9	6.7	6.6	6.6	6.8	10.2	10.1	10.1	10.2
Total current as % of GDP	5.7	5.8	5.8	6.3	7.4	6.9	6.5	6.3	6.1	6.2	6.5	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.2	0.4	0.4	0.3	0.1	0.2	0.4	0.4	0.5	0.4	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	620	771	944	1,143	1,082	1,075	1,194	1,258	1,317	1,383	1,488	2,745	2,895	2,975	3,305
Public total as % of GDP	4.1	4.3	4.6	5.0	5.6	5.2	5.1	4.5	4.3	4.4	4.7	8.0	7.8	7.8	8.0
Public current as % of GDP	3.8	3.9	4.1	4.5	5.4	4.9	4.6	4.2	4.1	4.2	4.4	7.7	7.6	7.6	7.8
Public total per capita PPS	431	534	693	859	810	789	893	857	865	922	1,020	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.28	0.35	0.43	0.45	0.25	0.28	0.52	0.31	0.27	0.19	0.33	0.2	0.2	0.2	0.2
Public as % total expenditure on health	69.5	69.3	73.4	75.2	74.9	73.4	74.8	68.1	65.6	66.7	68.6	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	17.8	18.4	17.8	14.4	16.0	17.4	14.7	16.3	16.2	15.8	16.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	90.9	91.4	91.9	91.8	92.0	92.4	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	32.8	31.9	28.4	28.2	26.8	27.6	28.2	31.8	32.8	31.5	32.1	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	3.4	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.9	502.1	503.0	505.2	508.5
Life expectancy at birth for females	77.4	77.1	77.2	77.6	78.7	78.9	79.3	79.6	79.6	80.1	79.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	65.2	65.0	64.5	65.9	67.1	67.6	68.1	68.4	68.5	69.2	69.2	76.6	77.3	77.7	77.9
Healthy life years at birth females	54.6	56.5	58.1	59.6	61.2	62.3	62.0	61.6	61.6	61.7	58.8	62.0	62.1	61.5	63.3
Healthy life years at birth males	51.4	52.6	53.3	54.5	57.2	57.4	57.0	56.6	56.8	57.6	54.1	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	135	140	132	134	131	125	346	338	328	311	326	64	138	131	127
Infant mortality rate per 1 000 live births	7.1	7.2	6.3	5.5	5.6	5.0	4.8	3.9	3.7	3.9	4.2	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.8	1.8	1.8	1.8	2.1	2.0	1.9	1.9	1.7	1.7	1.8	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.0	1.2	1.1	1.3	1.5	1.4	1.4	1.3	1.4	1.4	1.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.9	1.8	1.7	1.7	2.0	1.8	1.7	1.8	1.7	1.7	1.7	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.6	1.7	1.6	1.7	1.9	1.8	1.8	1.8	1.6	1.6	1.7	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.7	0.8	0.8	0.9	1.1	1.0	1.0	0.8	0.8	0.8	0.8	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.7	0.7	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.17.2: Statistical Annex - continued – Lithuania

Composition of total as % of total current health expenditure												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	31.3%	31.4%	30.4%	29.0%	28.4%	28.4%	29.1%	29.7%	28.1%	27.5%	27.8%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	1.4%	1.9%	2.4%	2.8%	3.0%	3.0%	3.1%	1.6%	1.6%	1.8%	1.8%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	17.2%	19.7%	19.4%	20.7%	20.6%	20.5%	21.7%	21.0%	23.0%	21.8%	22.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	34.3%	31.0%	28.5%	26.2%	26.6%	26.7%	26.0%	28.9%	28.2%	27.8%	26.7%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	3.4%	3.9%	3.4%	3.5%	3.0%	3.5%	2.9%	2.9%	2.9%	3.2%	3.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	1.9%	1.5%	2.1%	1.3%	1.2%	0.9%	1.2%	1.1%	1.3%	1.8%	2.0%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	2.1%	1.7%	2.1%	3.2%	2.0%	2.0%	2.0%	1.9%	1.8%	2.1%	2.0%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	42.4%	41.9%	38.6%	37.2%	35.8%	36.9%	38.2%	41.4%	38.9%	37.3%	38.3%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	2.1%	2.5%	3.4%	3.8%	3.9%	4.3%	4.3%	2.1%	2.2%	2.4%	2.5%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	18.6%	20.1%	19.8%	20.1%	20.2%	20.1%	20.6%	19.4%	20.0%	19.4%	19.0%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	17.8%	16.5%	15.5%	13.7%	14.3%	14.0%	12.6%	13.7%	14.3%	13.6%	13.3%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.1%	1.3%	1.2%	1.1%	1.1%	1.0%	1.1%	0.9%	1.0%	1.4%	1.1%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.9%	2.3%	2.9%	1.8%	1.7%	1.2%	1.7%	1.7%	2.0%	2.6%	3.0%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	2.7%	2.3%	2.7%	4.4%	2.8%	2.6%	2.8%	2.8%	2.7%	3.1%	3.0%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.15	0.29	0.33	0.42	0.51	0.47	0.59	1.00	1.05	1.06	1.10	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	0.5	0.6	0.7	0.7	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.2	1.2	1.0	1.3	1.5	1.8	2.0	2.4	2.4	2.2	2.1	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
Proportion of the population that is obese	16.0	:	:	:	:	:	:	:	:	16.6	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	24.5	26.5	:	24.2	:	:	:	:	:	20.4	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	12.3	12.7	13.4	13.3	12.4	12.9	12.7	15.1	15.0	15.2	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	362	365	372	370	365	383	409	422	428	431	434	324	330	338	344
Practising nurses per 100 000 inhabitants	710	711	705	711	697	716	753	759	755	760	766	837	835	825	833
General practitioners per 100 000 inhabitants	65	67	69	68	69	72	85	85	86	89	91	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	7.0	6.8	7.2	7.3	7.2	7.3	7.7	8.0	8.1	8.6	8.8	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	22	21	22	22	22	23	24	:	23	23	23	17	16	16	16
Day cases discharges per 100 000 inhabitants	822	982	1,374	1,605	1,729	1,927	2,349	:	2,568	2,197	2,403	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	79.0	76.0	75.5	72.7	72.4	72.0	73.1	72.5	71.6	72.8	72.2	77.1	76.4	76.5	76.8
Hospital average length of stay	7.3	7.1	8.8	8.5	8.1	8.1	8.3	8.0	7.9	8.0	7.9	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	3.6	4.4	6.0	6.9	7.3	7.9	9.0	:	10.0	8.7	9.4	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.7	4.7	4.6	4.6	4.5	Lithuania	EU	
AWG risk scenario	4.1	4.4	4.6	4.8	5.0	5.3	5.4	5.5	5.5	5.4	5.4	5.3	0.4	0.9	
													1.2	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	2.9	2.7	2.6	2.4	2.3	2.1	2.0	2.0	1.9	1.8	1.8	1.7	Lithuania	EU	
													-40.3	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.18. LUXEMBOURG

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

GDP per capita (68.8 thousand PPS in 2015) of Luxembourg is the highest in the EU. Despite having decreased since its peak in 2007, it remains more than double of the EU average of 29.6 thousand PPS.

Luxembourg has roughly half a million inhabitants, less than 1% of the EU population. Despite its limited population, it achieves the highest GDP per capita with 68.8 thousand PPS in 2015, which is almost 2.5 as much as the EU average of 29.6 thousand PPS for the same year. The population is projected to almost double in the next decades, reaching 1.0 million in 2070.

Total and public expenditure on health as % of GDP

Total expenditure on health as a percentage of GDP (6.1% in 2015) is below the EU average (10.2%) and has remained relatively stable in last years, with a level of 6.1 % in 2011, reaching 7.1% in 2013)⁽²⁴⁵⁾. The same applies to public expenditure on health as a percentage of GDP, with 5% below the EU average (8% in 2015) but relatively stable since 2011 (5.1%). However, when expressed in per capita terms, both total and public expenditure (4,649 PPS and 3,815 PPS in 2015) are well above the EU average (3,305 PPS and 2,609 PPS). Looking at health care without long-term care⁽²⁴⁶⁾ reveals a similar picture, with spending below the EU average (4% vs 6.8% in 2015).

Expenditure projections and fiscal sustainability

As a result of population ageing, health care expenditure is projected to increase by 1.2 pps of GDP (below the average change in the EU of 0.9 pps in the "AWG reference scenario"). When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk

⁽²⁴⁵⁾Note that figures differ more before and after 2011. This may be partly due to a break in series due to the passage from SHA 1.0 to SHA 2011.

⁽²⁴⁶⁾To derive this figure, the aggregate HC.3 is subtracted from total health spending.

scenario"), health care expenditure is expected to increase by 1.7 pps of GDP from now until 2070 (EU: 1.6)⁽²⁴⁷⁾.

Luxembourg faces low medium-term fiscal sustainability risks, primarily due to the initial low level of government debt and the favourable budgetary position, which compensate for the projected ageing costs. Over the long run, Luxembourg faces high risks to fiscal sustainability. These risks are entirely driven by the necessity to meet future increases in ageing costs (notably pension, health care and long-term care expenditures)⁽²⁴⁸⁾.

Health status

Life expectancy at birth (84.7 for women and 80 for men in 2015) is above the EU average, but healthy life years at birth are below the EU average for women (60.6) but above for men (63.7). They have overall increased over the last decade, although the trend seems to be inverted in recent years for healthy life years, both for women and men, which may also obey to recent changes in the methodology for eliciting self-reported health status⁽²⁴⁹⁾. Mortality is mainly due to circulatory system diseases and cancers⁽²⁵⁰⁾. Transport accidents are above the EU average, with a rate of 6.6 vs 5.2 in 2015, and death due to intentional self-harm is higher compared to EU average, with a rate of 13.36 (21.6 for males and 6.22 for females) vs 11.6 for the EU in 2015. In addition, infant mortality is below the EU average thanks to comprehensive and free antenatal and postnatal services. Amenable mortality, mortality rates which are thought avoidable if appropriate and timely care is delivered, is below EU average (in 2015, 97 vs 127 at EU level). As for the lifestyle of population, an increasing trend in the share of overweight population seems to have

⁽²⁴⁷⁾The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽²⁴⁸⁾European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽²⁴⁹⁾Data on life expectancy and healthy life years is from the Eurostat database.

⁽²⁵⁰⁾State of Health in the EU Luxembourg Country Health Profile 2017, OECD, Health Observatory and European Commission. https://ec.europa.eu/health/sites/health/files/state/docs/chp_lu_english.pdf.

characterised Luxembourg in the past years. On the contrary, alcohol consumption has been decreasing over the past decade and so has the share of regular smokers. Programmes to prevent obesity through healthy eating and sports have already been launched, especially among young and children, and, paired with other existing initiatives to promote healthy behaviours, such as regulations on alcohol advertising, they should be further expanded ⁽²⁵¹⁾.

System characteristics

Overall description of the system

In 2015, about 82.0% of total health expenditure was public expenditure (statutory insurance contributions and taxation), about 10.6% was out-of-pocket spending and the remaining 7.4% mainly came from voluntary private health insurance.

Compulsory health insurance ⁽²⁵²⁾ is provided and managed by the National Health Insurance (Caisse Nationale de Santé, CNS), which was created by merging multiple sickness funds into one single payer in 2009. The CNS is obliged to maintain a reserve of 10% of the total planned expenditure ⁽²⁵³⁾.

The health insurance is mainly financed by contributions. Contributions are equally split between employers and employees, which are calculated as percentage of gross-income ⁽²⁵⁴⁾. Different rules apply to the self-employed and specific professions. The central government participates by paying 40% of the contributions. If gross-income does not exceed a certain level, no contributions have to be paid as a means to support low income or disadvantaged groups.

⁽²⁵¹⁾ <http://www.clep.lu/code-de-deontologie/>.

⁽²⁵²⁾ The social health insurance comprises health care, long-term care and accident insurance.

⁽²⁵³⁾ According to the OECD, Luxembourg scores 1 out of 6 in the OECD scoreboard due to the not very stringent budget controls. See Joumard, I., C. André and C. Nicq (2010), "Health Care Systems: Efficiency and Institutions", OECD Economics Department Working Papers, No. 769, OECD Publishing, p. 39. doi: 10.1787/5kmfp51f5f9t-en [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=eco/wkp\(2010\)25](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=eco/wkp(2010)25).

⁽²⁵⁴⁾ With a maximum limit of five times the minimum guaranteed income.

Coverage

Luxembourg's health care is based on a very comprehensive compulsory health insurance package. In 2015, 95.2% ⁽²⁵⁵⁾ of all citizens and registered residents were covered by the statutory health insurance system. Further, the system covers a high number of cross-border workers and their family members.

Administrative organisation

Health system regulation is a shared responsibility of the Ministry of Health and the Ministry of Social Security, which cooperate regarding the organisation, legislation and financing of the system. The Ministry of Health focusses on the planning and organisation of health care service delivery, enacting laws and regulations applying to health providers and directly co-finances public health programmes. It is further responsible for the determination of the national hospital planning ⁽²⁵⁶⁾ and the scope of work of health care professionals. The Ministry of Social Security defines social policy and oversees the public institutions funded by the health, accident and long-term care insurance schemes. Public expenditure on health administration and health insurance as a percentage of GDP (0.26%) is close to the EU average (0.26%). Public expenditure on health administration and health insurance as a share of total current health expenditure is also above the average with 4.9% recorded for 2015 (vs. EU average 3.8%).

Role of private insurance and out of pocket co-payments

A low level of cost-sharing applies to many services. A higher level of cost-sharing applies to glasses and contact lenses, dental care and dental prostheses. Cost-sharing exemptions apply for people where the amount of cost-sharing exceeds 2.5% of the gross-income. In fact, out-of-pocket spending accounts for only a small part of private expenditure and decreased over the last decade (10.6% of total health spending which is less than the EU-average of 15.9%, after a decrease during the last decade from a level of 13.4% in

⁽²⁵⁵⁾ OECD data.

⁽²⁵⁶⁾ According to new legislation that came into force in 1.4.2018: <http://legilux.public.lu/eli/etat/leg/loi/2018/03/08/a222/jo>.

2006)⁽²⁵⁷⁾. Additional voluntary private insurance is taken up by around 53% of the population to cover out-of-pocket payments and cost sharing (complementary insurance). Note, however, that voluntary private health insurance schemes only account for about 7.7% of total expenditure in 2015. As a proportion of total benefits reimbursed, the part of voluntary insurance remains then very low since the compulsory system reimburses a comprehensive set of services.

Types of providers, referral systems and patient choice

Primary care is provided by general practitioners (GPs) who are self-employed and mostly work in individual private practices. Specialist outpatient care is provided by self-employed individuals working in their own private practices and/or hospital.

In Luxembourg, the number of practising physicians per 100 000 inhabitants (291 in 2015) is below the EU average (344). The number of GPs has increased, from 78 in 2005 to 87 per 100.000 inhabitants in 2015, which is higher than the average in the EU. To practise, physicians need an approval of their qualifications by the Ministry of Health but there are no legal barriers to limit the medical personnel as such, especially since the EU legislation on mutual recognition of medical qualifications has been introduced. Considering that the system remains quite attractive, the number of physicians practising in Luxembourg is expected to continue to increase even if the high proportion of physicians aged 45+ (68% in 2017), likely to retire in the short to medium term, will lessen this inflow. In comparison, the number of nurses per 100 000 inhabitants (1,191) is one of the highest of the EU and there are 4.1 practising nurses per physician. The remuneration of nurses is indeed very attractive in Luxembourg, with a ratio of 1.4 to the average wage of the working population in Luxembourg.

Patients are free to register with a GP but GPs have no gate-keeping role: patients can directly consult specialists even in the case of common primary care. Patients have the right to choose their GP, specialist and hospital and there are no legal means

⁽²⁵⁷⁾Note that this may be driven by the break in series after 2011 due to the shift to SHA 2011.

to limit the volume of activity even if there are some limitations on the number of visits to more than one physician of the same speciality within a certain period of time. In this context of free choice, improving the availability and transparency of information about health care providers' activity and availability is essential to optimise the patients' choice. Finally, pharmaceuticals are mostly distributed through pharmacies whose number is strictly controlled by the authorities. Since 2011 pharmaceuticals delivered by hospitals to patients as outpatient care no longer fall under the hospital budget but are integrated in the pharmaceutical budget.

Pricing, purchasing and contracting of healthcare services and remuneration mechanisms

Physicians are paid on a fee-for-service basis. There are no performance-related payment bonuses for example to provide incentives for cost-effective health promotion, disease prevention, or disease management. The fees for medical services are negotiated every 2 years between the National Health Insurance and representatives of health care professionals. Every health care provider has to be contracted with the CNS; and it is determined by law that they must adhere to the fees agreed upon.

Health care services in Luxembourg are organised based on a reimbursement system. Generally, the patient has to pay the costs in advance and submits the receipts to the CNS for partial or total reimbursement. Exceptions apply to hospital treatments, laboratories analyses and pharmaceuticals as well as third party payment for disadvantaged groups.

Hospitals are financed by the National Health Insurance. Every two years, the government decides upon a global budget which is then divided annually by the health insurance between the hospitals. Hospitals⁽²⁵⁸⁾ have autonomy to recruit their staff. The hospitals are encouraged to review their quality management regularly. These efforts have been undertaken by the CNS in order to

⁽²⁵⁸⁾
http://www.legilux.public.lu/leg/textescoordonnes/codes/code_securite_sociale/code_securite_sociale.pdf#page=57.

improve quality and cost-containment; the activity is combined with a financial reward.

Hospital discharge rates per 100 inhabitants are below the EU average (14.57 vs 16 in 2015) for inpatients and have decreased over the last ten years⁽²⁵⁹⁾. Conversely, after increasing all through the last decade, day-case discharges per 100 000 inhabitants are above EU average (7,921 vs 7,635). The average length of stay (9.1 days in 2015) is above the EU average (7.6 days) but has been quite stable over the last ten years. This may partly be a consequence of a financing system based on global hospital budgets, which does not directly incentivise its reduction. To tackle this issue, in light of the relatively low bed occupancy rate, the current system based on the global budget could benefit from including some elements of activity-based reimbursement, to promote a more efficient use of resources.

Since 1995, for pharmaceuticals, patients must pay only the part of the costs to the pharmacy not being reimbursed by the health insurance⁽²⁶⁰⁾.

The market for pharmaceutical products

Total expenditure on pharmaceuticals as a percentage of GDP⁽²⁶¹⁾ is well below the EU average (0.5% vs. 1.4% in 2015) while consumption is around average.

Luxembourg imports all pharmaceutical products at prices based on those used in the country of origin which normally is Belgium, Germany or France⁽²⁶²⁾. Drugs are mostly sold in pharmacies but they can be delivered by hospitals to patients as outpatient care, in which case they still fall under the pharmaceutical budget. The counsellor's role of the pharmacist has been increased by encouraging the substitution of a drug by a cheaper one if they

have the same qualitative and quantitative fundamentals. For this purpose, doctors and pharmacists have a list of exchangeable products. The CNS maintains a comprehensive list of drugs approved for reimbursement (positive list). There are three categories of reimbursement for pharmaceuticals for outpatient care, with reimbursement rates of 40%, 80% or 100%. Drugs administered at the hospital fall under hospital's budget and are thus free of charge for the patient.

Use of Health Technology Assessments and cost-benefit analysis

The use of Health Technology Assessment appears to be limited in terms of the definition of the benefit basket.

Health and health-system information and reporting mechanisms

Luxembourg has been quite active in this field in recent years and a number of projects have been established to monitor and collect health care data. The Luxembourgish government has adopted a national eHealth plan which envisages the establishment of a national eHealth agency and the introduction of an electronic health record, enabling the exchange and sharing of health data between health care professionals. The aim is to improve quality and performance of the system and to control the development of expenditure, especially by avoiding redundant tests and examinations. Each patient can have a personal file containing administrative data and diagnostic data such as laboratory results, radiological data and medications register.

Health promotion and disease prevention policies

Several programmes are in place in order to promote health, including breast cancer screening, smoking cessation, free contraception, prenatal and postnatal programmes, and flu vaccination. Further, the Ministry of Health supports school health programmes, vaccination programmes, healthy living programmes and the distribution of health education material.

Public expenditure on prevention and public health services as a percentage of GDP (0.1% vs EU 0.3%) and as a percentage of total current health

⁽²⁵⁹⁾ Eurostat.

⁽²⁶⁰⁾ Positive list of pharmaceuticals, reimbursement is possible only if on list Cf Art 22 CSS http://www.legilux.public.lu/leg/textescoordonnes/codes/code_securite_sociale/code_securite_sociale.pdf#page=57.

⁽²⁶¹⁾ Expenditure on pharmaceuticals used here corresponds to category HC.5.1 in the OECD System of Health Accounts. Note that this SHA-based estimate only records pharmaceuticals in ambulatory care (pharmacies), not in hospitals and that over the counter drugs are not included either.

⁽²⁶²⁾ When determining the price for products imported from outside Europe, the price of the product in Belgium, France and Germany is taken into account.

expenditure (2.4%) are well below the EU average in 2015 (3.2%).

Recently legislated and/or planned policy reforms

Facing the general economic crisis in Europe, the reform of the health system from 2010 ⁽²⁶³⁾ not only tried to tackle the negative effects of the crisis but provided also some structural changes in order to improve the quality of care and to rationalise expenditure.

Measures include the creation of the Cellule d'expertise médicale to review services and medical devices proposed for introduction into the health benefit basket or the modification thereof. In addition, the possibility was introduced for patients, especially chronically ill persons, to choose a doctor as a reference point for their medical treatments and follow-ups. The GP organises the care path and manages the patients' medical records, for which the eHealth agency is responsible.

The standardisation of medical procedures and the organisation of hospital networks as well as a better coordination between primary and hospital care were actively supported to improve quality and efficiency. Further, policies promoting greater generic drug substitution (patients refusing the substitution proposed by the pharmacist have greater proportion of cost-sharing) have been introduced. Measures also included the introductions/strengthening of tools to monitor the quality of care and to increase transparency (at patient, hospital and physician level, as well as at the health insurance level). In particular, the law of 2010 scheduled the creation of an electronic patient file to be used in all health care sectors and containing all the information related to the health status of a patient.

For the legislative period 2013-2018 the government intends to strengthen health care promotion and prevention of diseases by integrating health questions in all policies ("health in all policies"). The ongoing growth of health care

⁽²⁶³⁾

<http://www.legilux.public.lu/leg/a/archives/2010/02/42/a242.pdf#page=2>.

expenditure shall be aligned to the economic growth of the country.

Challenges

The analysis above has shown that a range of reforms have been implemented in recent years – e.g. improvements regarding hospital efficiency, improved data collection and monitoring and the control of pharmaceutical expenditure – and which Luxembourg should continue to pursue. The main challenges for the Luxembourgish health care system are as follows:

- To improve the basis for more sustainable and efficient financing of health care in the future (e.g. considering additional sources of general budget funds), aiming at a better balance between resources and spending.
- To continue to enhance and better distribute primary health care services to improve effectiveness and efficiency of health care delivery. To continue to shift excessive capacity and activity of acute inpatient care towards ambulatory and outpatient care services, and strategically directing more resources towards providers of lower levels of care.
- To implement a monitoring of human resources in the health care sector that ensures a balanced skill-mix, that avoids staff shortages and that motivates and retains staff to the sector in the future. In addition, to consider enhancing financial and institutional incentives for health care professionals to provide adequate levels of services to patients based on quality indicators, performance-based reporting and payment bonuses.
- To increase the use of cost-effectiveness information, such as HTAs, in determining the basket of goods.
- To improve the systems for data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted.
- Promote the use of the recently deployed eHealth tools including electronic patient

records can help ensuring effective referral systems from primary to specialist care and improving care coordination between types of care.

- To foster public action in the area of health promotion and disease prevention on the basis of the defined public health priorities (diet, smoking, alcohol, lack of exercise), given the pattern of risk factors.

Table 2.18.1: Statistical Annex – Luxembourg

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	30	34	37	38	37	40	43	44	46	50	52	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	68.7	71.4	75.4	71.9	64.8	65.4	66.1	64.4	64.0	67.2	68.8	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	1.6	3.6	6.6	-3.0	-6.1	2.9	0.2	-2.6	1.0	3.3	0.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	0.6	0.9	-5.1	1.3	-1.0	-17.5	5.3	7.8	1.0	-11.7	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.0	7.8	7.4	7.2	7.8	7.5	6.1	6.6	7.1	6.9	6.1	10.2	10.1	10.1	10.2
Total current as % of GDP	6.7	7.0	7.3	7.2	6.7	6.2	6.1	6.6	6.6	6.3	6.1	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.3	0.8	0.0	0.0	1.1	1.2	0.0	0.1	0.6	0.7	0.0	0.9	0.6	0.2	0.3
Total per capita PPS	4,311	4,632	4,750	4,689	4,807	4,941	4,287	4,620	5,082	5,218	4,649	2,745	2,895	2,975	3,305
Public total as % of GDP	5.9	5.6	5.2	5.8	6.6	6.2	5.1	5.5	5.5	5.2	5.0	8.0	7.8	7.8	8.0
Public current as % of GDP	5.9	5.5	5.2	5.8	6.5	6.1	5.1	5.5	5.4	5.2	5.0	7.7	7.6	7.6	7.8
Public total per capita PPS	2,441	2,487	2,505	2,701	2,821	2,835	2,556	2,727	3,923	3,902	3,815	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.02	0.02	0.01	0.01	0.07	0.06	0.04	0.08	0.08	0.03	0.03	0.2	0.2	0.2	0.2
Public as % total expenditure on health	74.2	71.5	70.8	81.2	85.1	82.5	83.3	83.2	77.2	74.8	82.1	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	11.4	11.5	11.5	11.8	11.1	10.9	11.3	11.6	11.4	10.9	10.3	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	98.7	98.2	97.9	97.2	97.2	97.2	97.2	97.0	96.5	96.0	95.2	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	12.9	13.4	10.3	10.1	9.9	10.2	10.9	10.4	10.3	10.5	10.6	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	502.1	503.0	505.2	508.5
Life expectancy at birth for females	82.3	81.9	82.2	83.1	83.3	83.5	83.6	83.8	83.9	85.2	84.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	76.8	76.7	78.1	78.1	77.9	78.5	79.1	79.8	79.4	80.0	76.6	77.3	77.7	77.9
Healthy life years at birth females	62.4	62.1	64.6	64.2	65.9	66.4	67.1	66.4	62.9	63.5	60.6	62.0	62.1	61.5	63.3
Healthy life years at birth males	62.3	61.2	62.3	64.8	65.1	64.4	65.8	65.8	63.8	64.0	63.7	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	65	66	63	59	61	57	104	101	112	87	91	64	138	131	127
Infant mortality rate per 1 000 live births	2.6	2.5	1.8	1.8	2.5	3.4	4.3	2.5	3.9	2.8	2.8	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.9	1.7	1.6	1.7	1.9	1.8	1.7	1.9	1.9	1.7	1.5	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.1	2.1	2.0	2.2	2.4	2.4	1.5	1.6	1.5	1.5	1.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	0.7	0.7	0.7	0.7	0.8	0.7	0.5	0.6	0.6	0.5	0.5	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.7	1.6	1.4	1.6	1.7	1.6	1.5	1.6	1.6	1.4	1.3	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.8	1.7	1.6	1.8	2.0	1.9	1.1	1.2	1.1	1.1	1.1	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.5	0.4	0.4	0.4	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.18.2: Statistical Annex - continued - Luxembourg

Composition of total as % of total current health expenditure												EU-latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	28.2%	25.0%	22.0%	23.0%	28.5%	28.1%	28.2%	28.5%	28.9%	26.6%	25.3%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	:	:	:	2.0%	2.5%	2.4%	2.6%	2.7%	2.6%	2.9%	3.1%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	31.8%	29.4%	26.9%	29.9%	36.1%	37.7%	24.4%	23.6%	23.2%	23.8%	24.3%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	10.8%	9.8%	9.0%	9.5%	11.2%	11.1%	8.8%	8.5%	8.4%	8.3%	8.6%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	2.4%	2.3%	2.0%	2.2%	2.5%	2.7%	2.3%	2.1%	2.1%	2.2%	2.3%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.4%	1.9%	1.9%	1.7%	2.7%	2.2%	2.3%	2.1%	2.4%	2.4%	2.5%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.8%	1.3%	1.2%	1.3%	1.8%	3.4%	4.9%	4.6%	4.4%	4.3%	4.3%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	28.7%	28.5%	27.3%	26.6%	26.6%	26.1%	29.7%	29.9%	30.0%	27.7%	26.2%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	:	:	:	2.5%	2.5%	2.4%	3.1%	3.1%	3.0%	3.3%	3.6%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	30.4%	30.5%	31.2%	30.9%	30.7%	31.5%	22.0%	21.5%	21.1%	21.9%	22.4%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	10.3%	10.5%	10.6%	10.1%	9.8%	9.7%	8.7%	8.4%	8.1%	8.1%	8.5%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.3%	1.4%	1.5%	1.4%	1.4%	1.5%	1.4%	1.3%	1.3%	1.4%	1.4%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.7%	2.3%	2.5%	2.1%	2.8%	2.3%	2.8%	2.4%	2.4%	2.5%	2.4%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	1.3%	1.3%	1.3%	1.4%	1.4%	1.3%	5.3%	5.1%	5.4%	5.0%	5.2%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	1.07	1.06	1.04	1.23	1.41	1.38	1.35	1.32	1.29	1.26	1.23	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	1.1	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.6	1.6	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.5	2.2	2.2	1.8	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Proportion of the population that is obese	18.6	20.4	20.0	20.3	20.3	22.1	22.5	23.5	23.0	15.1	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	23.0	21.0	21.0	20.0	19.0	18.3	16.9	16.8	15.7	15.3	15.0	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	11.8	12.0	11.8	11.5	11.4	11.4	11.5	11.3	11.0	11.1	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	255	261	268	272	270	277	276	278	281	286	291	324	330	338	344
Practising nurses per 100 000 inhabitants	1097	1094	:	:	1112	1105	1127	1192	1193	1197	1191	837	835	825	833
General practitioners per 100 000 inhabitants	78	77	82	81	79	82	82	83	86	88	87	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	6.0	5.9	6.0	6.1	6.1	5.9	6.0	6.0	6.0	5.9	5.8	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	16	16	16	16	15	15	15	14	14	13	:	17	16	16	16
Day cases discharges per 100 000 inhabitants	4,475	5,065	5,685	6,364	6,493	6,671	6,983	7,403	7,642	7,921	:	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	69.0	70.0	72.3	72.7	73.7	72.5	72.4	73.2	71.6	71.1	71.6	77.1	76.4	76.5	76.8
Hospital average length of stay	7.2	7.4	9.1	9.2	9.4	9.1	8.8	8.8	8.9	8.9	9.1	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	21.7	24.5	26.9	:	29.9	30.3	32.2	34.2	35.8	37.5	:	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	3.9	4.0	4.0	4.2	4.3	4.4	4.6	4.7	4.8	4.9	5.0	5.1	Luxembourg	EU	
AWG risk scenario	3.9	4.1	4.2	4.4	4.5	4.7	4.9	5.1	5.3	5.4	5.5	5.6	Luxembourg	EU	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	0.6	0.6	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	Luxembourg	EU	
													Luxembourg	EU	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.19. MALTA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

In 2017, the GDP at market prices in PPS per capita stood at 28,700, which is below the EU average of 29,900. Population was estimated at 0.5 million in 2017. It is expected to stay within half a million in the coming decades, with the fastest expansion occurring in the next years.

Total and public expenditure on health as % of GDP

Total expenditure on health as a percentage of GDP (9.8% in 2014) has increased over the last decade (from 9.0% in 2005) and is below the EU average of 10.2% in 2015. Throughout the last decade, total public expenditure has first decreased then increased as a share of GDP: from 5.2% in 2005 down to 4.5% in 2010, and then up to 6.4% of GDP in 2014 (EU: 8.0% in 2015). Looking at health care without long-term care⁽²⁶⁴⁾ reveals a similar picture with public spending below the EU average (MT: 5.6% in 2014 vs. EU: 6.8% in 2015). When expressed in per capita terms, also total spending on health at 2,566 PPS in 2014 was below the EU average of 2,975 in 2014. So was public spending on health care: 1,675 PPS in 2014 vs. an average of 2,324 PPS in 2014⁽²⁶⁵⁾.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by a considerable 2.7 pps of GDP between 2016-2070, high above the average growth expected for the EU of 0.9 pps of GDP, according to the "AWG reference scenario". When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health

care expenditure is expected to increase by 4.3 pps of GDP from now until 2070 (EU: 1.6 pps)⁽²⁶⁶⁾.

Medium fiscal sustainability risks appear for Malta over the long run. These risks are primarily related to the strong projected impact of age-related public spending (notably pensions, healthcare and long-term care)⁽²⁶⁷⁾.

Health status

Life expectancy at birth, 84.0 years for women and 79.7 years for men, is above the respective EU averages of 83.3 and 77.9 years in 2015. Healthy life year expectancy is very high with 74.6 years for women and 72.6 for men in Malta versus 63.3 and 62.6 in 2015 in the EU⁽²⁶⁸⁾. The infant mortality rate of 5.8‰ is above the EU average of 3.6‰ in 2015, having remained relatively consistent throughout the last decade, however caution needs to be exercised when interpreting such figures in view of the fact that termination of pregnancy is illegal in Malta.

As for the lifestyle of the Maltese population, the data indicates a proportion of regular smokers of 18.9% in 2014, being below the EU average of 20.9%. The proportion of the obese population is far above EU level. In 2014, one in four adults (25% of the population) were reported as being obese, in comparison with EU average of 15.4%, rising marginally from 23% in 2009 (EU average 15.5%). Overweight and obesity rates among 15-year old children has increased by 36% since 2001, and currently stand at 30% which is more than one and a half times the EU average. There are differences in obesity rates between girls and boys, these being 26% and 34% respectively⁽²⁶⁹⁾. The alcohol consumption is below the EU level.

⁽²⁶⁴⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽²⁶⁵⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to EUROSTAT data series, which reflect current expenditure only.

⁽²⁶⁶⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽²⁶⁷⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽²⁶⁸⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

⁽²⁶⁹⁾ Health at a Glance: Europe 2016. State of Health in the EU cycle, OECD.

System characteristics

Overall description of the system

A National Health Service (NHS), managed by the Ministry of Health and funded through taxation, provides coverage for a comprehensive range of services (preventive, curative and rehabilitative care).

Coverage

The Maltese health care system is based on the principle of equity and solidarity with universal coverage. The public healthcare system provides a comprehensive basket of services to all persons residing in Malta who are covered by the Maltese social security legislation and also provides necessary care to groups such as irregular immigrants and foreign workers who have valid work permits. There are no user charges or co-payments for health services. The private sector acts as a complementary mechanism for healthcare coverage and service delivery.

Administrative organisation and revenue collection mechanism

The budget for the public health sector is defined annually in Parliament when the general budget is approved. A specific unit for financial management and control at the Ministry of Health monitors and controls the financial management of the public health system.

Role of private insurance and out of pocket co-payments

Private expenditure constituted a relatively high share, with 34.7%, of total health expenditure in 2014, which is above the EU average of 23.5% in 2015. A large part of private expenditure is out-of-pocket expenditure (28.9% of total health expenditure in 2014 and much higher than the respective EU average of 15.9% in 2015). Authorities ensure means-tested entitlement (for people with low incomes) to pharmaceuticals, dental and optometric care, i.e. benefits mostly excluded from the free public healthcare basket. The remainder is left to private health insurance whose share of private expenditure has remained steady over the last few years. The chronically ill are provided with free medicines according to their

condition in a system which is separate from the one mentioned above.

Types of providers, referral systems and patient choice

The public healthcare system is the key provider of health services. The private sector complements the provision of health services, in particular in the area of primary health care. In 2016, a public-private partnership agreement was signed between the Maltese government and a private international health care provider to operate three hospitals in the Maltese islands. In addition, some services, especially for long-term and chronic care, are also provided by the private sector, the Church and other voluntary organisations.

The state health service and private general practitioners (GPs) provide primary health-care services. Increasing the effectiveness and consolidation of the position of the primary health care system is the cornerstone of the National health care system. To this effect a number of actions have been implemented to strengthen quality and efficiency of services such as new referral systems in liaison with the private family doctor. Private family doctors are empowered to directly refer patients with musculoskeletal problems for physiotherapy services in primary health care settings. Both public and private doctors also refer their patients for bone densitometry and X-rays. A number of public health centres are equipped with digital X-ray facilities, enabling X-rays to be taken on site and accessed remotely by hospital specialists in secondary care.

Secondary and tertiary care is mainly provided by specialised public hospitals of varying sizes. Hospital care is mostly delivered in NHS hospitals. The main acute general services are provided by one teaching hospital (Mater Dei hospital) incorporating specialised, ambulatory, inpatient care and intensive care services. There has been a significant amount of investment in public-private partnerships, in order to improve the capacity in terms of surgical operations as well as diagnostic and emergency services. Some minor procedures have recently been partly relocated to primary health centres to alleviate the burden on the main hospital. Anticoagulation monitoring services have also been partly devolved to health centres.

Under the NHS, primary care is delivered through a network of public health centres, provided by general practitioners (GPs), nurses and some specialists. NHS outpatient specialist care is centred in the hospitals outpatient departments, in which most of the specialists work, with a number of ambulatory specialist clinics being held in primary health centres.

In addition to NHS provision, there is also private outpatient primary care and specialist care practice, given mostly from the private doctor's office, for private patients. Doctors are allowed part-time after-hours private clinics when in public employment. This applies mostly to specialities other than family medicine, where there seems to be a better uptake of the option that the public sector offers for a better paid, exclusive contract, which bars private practice.

There is a compulsory referral system from primary care to specialist doctors. GPs act like gatekeepers to specialist and hospital care. However, this system is very often bypassed by patients attending specialist health care directly in the private sector. One reason is the degree of choice of GP, or specialist, in the private sector and the other is that in certain specialist areas there are still relatively long waiting times for outpatient appointments in the busier specialities.

As a rule, patients consult more frequently GPs in the private sector than GPs in the public sector, mostly due to the continuity of care that the same GP in the private sector can provide, as opposed to the GP on call in the public sector. However, not all GPs in the private sector are well-equipped to deal with any sort of emergency, especially those requiring urgent investigations such as specific blood tests and radiography.

Some of the health centres are equipped to deal with minor emergencies for 24 hours and 7 days a week. The Accident and Emergency department at Mater Dei Hospital is equipped to deal with more serious emergencies. The Maltese tend to make unnecessary use of hospital emergency care, particularly since they would not want to risk that they might need specialised investigations or admission to hospital, for which the public GP would refer them to A&E. This peaks in weekends when private practitioners tend to have their days off.

A number of initiatives are being adopted in Malta to help alleviate this problem. European investment is being sought to create a major primary care hub (to become operational in 2023) which should alleviate the congestion at the hospital. Indeed, according to this plan, a number of services, particularly those that are ambulatory, elective in nature, and not dependent on other hospital infrastructure, would be moved towards the primary care hub, in addition to other primary care functions. It would be desirable that this would be accompanied by a cultural shift within the population to visit the primary care facilities for emergency care, encouraged by a clear-cut organisational and financial regulation aiming at avoiding duplication of emergency services between the hospitals and the primary health hub.. Further investment is being sought for setting up of an integrated IT infrastructure which would bridge between primary and secondary care, together with public and private care. This should also significantly increase continuity of care and, consequently, one hopes, the increased engagement of the public with primary care services.

The density of physicians in Malta is slightly above the average density in the EU. In 2015, there were 379 practising physicians per 100,000 inhabitants, compared to 344 in EU. The number of general practitioners is also slightly above the EU average (81 per 100,000 inhabitants vs. 78 in the EU). The number of nurses per 100,000 inhabitants (794 in 2015) is slightly below the EU average of 833.

In 2015, the number of acute care beds was relatively low with 324 compared to 402 per 100,000 inhabitants in the EU. With this capacity Malta achieves discharge rates of 15.3 per 100 inhabitants (EU: 16.2).

Treatment options, covered health services

The public healthcare system offers primary, secondary and tertiary health care services. The private sector acts as a complementary mechanism for health care coverage and is now also involved in a number of public-private partnerships related to healthcare provision.

The state health service and private general practitioners comprise primary health care in

Malta. However, the two systems of primary care practice function independently of one another and the latter account for two-thirds of the workload. Secondary and tertiary care is mainly provided by specialised public hospitals of varying size and function. The main acute general services are provided by one main teaching hospital incorporating specialised, ambulatory, inpatient care and intensive care services. A new oncology hospital was opened in September 2015 providing oncology and haematology care ⁽²⁷⁰⁾. Malta has become almost self-sufficient in terms of providing most tertiary care. When it comes to the provision of highly specialised care, there are cases where this is provided by visiting consultants from specialised centres abroad who periodically attend local hospitals for outpatient consultations and/or perform operations. For certain conditions patients are sent overseas because it would neither be cost-effective nor feasible to conduct such treatments locally.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

GPs and specialists are paid on a salary basis when working for the NHS, while they receive a fee-for-service in the private sector. The collective agreement with the Medical Association of Malta, concluded by the Government in 2007, includes job plans for doctors in senior posts resulting in better pay per performance. The possibility of exclusivity contracts with the NHS has been introduced, remunerated at a higher rate. Such job plans and exclusivity contracts have also been extended to various levels within the general practice profession with the revision of the said collective agreement in 2013, and to resident specialists in the 2017 agreement.

Hospital budgets are defined by the government on a prospective global budget basis, but managers' decision-making autonomy assists in increasing hospital efficiency.

The market for pharmaceutical products

While there is no direct product price regulation, there is a tendering system to control the prices of

NHS covered medicines and a cost/benefit analysis is conducted prior to the inclusion of a medicine in the Government Formulary List. Authorities promote the rational prescribing of physicians through treatment guidelines. Education and information campaigns on the prescription and use of medicines are also organised from time to time. Within the NHS prescribing is done by active ingredient and pharmacists dispense the products procured by the public system which may include generics. For private patients generic substitution is voluntary.

Use of Health Technology Assessments and cost-benefit analysis

The use of health technology assessment (HTA) for decision-making purposes is increasing (including the development of treatment guidelines or for defining the benefit package or medicines). Since HTA requires scientific know-how and administrative capacity which for a small country may represent a significant cost, local authorities are engaging with initiatives such as EUnetHTA. Authorities are encouraging providers to set up patient care protocols to enhance safety and clinical outcomes.

eHealth, Electronic Health Record

eHealth and electronic hospital records empower patients by introducing access to their medical data. While hospital activity data is available in certain detail, even from parts of the private sector, there are still information gaps in a number of areas (e.g. providers' clinical outcomes, appropriateness of processes, outputs, patient experiences and satisfaction). Malta's National Health System Strategy gives particular attention to the use of information technology and the creation of a healthcare information system. The roll out of *myHealth service* since 2012 allows patients and doctors to access electronic medical records through a nominated doctor of their choice and an eID, thus strengthening continuity of care for patients. Developments are continuously being deployed on this platform connecting more and more services over time. A number of eHealth initiatives are currently underway with procurement procedures already in place.

⁽²⁷⁰⁾ Azzopardi-Muscat N, Buttigieg S, Calleja N, Merkur S (2017). Malta: Health system review. Health Systems in Transition, 2017; 19(1):1-137.

Health promotion and disease prevention policies

The central government has set a number of relevant public health objectives strongly associated with the risk factors and pattern of mortality and disease. Priorities include the prevention and control of obesity and diabetes through a national platform that promotes healthy diet and exercise, decrease smoking and alcohol use. Authorities also see the education and sports sector as an important partner through the inclusion of health promotion and disease prevention in school curricula and the training of health staff. Such public health objectives are clearly defined in strategy and policy documents published over the past five years, including obesity, diabetes, non-communicable disease, cancer and sexual health, among others.

Recently legislated and/or planned policy reforms

Recent policy response

Health promotion and disease prevention

The National Health System Strategy (NHSS) recognised that health promotion and disease prevention initiatives are key to improving population health and maintaining the sustainability of the health care system in the long term. A number of sectoral strategies have been launched since 2014, including:

- a new National Cancer Plan (2017-2021) that builds on a previous National Cancer Plan (2011-2015);
- a Diabetes strategy (2015-2020);
- a Hepatitis strategy (2018-2025);
- a national Breastfeeding Policy (2015-2020);
- a Food and Nutrition Policy and Action Plan (2015-2020);
- a Healthy Lifestyle in Schools: Healthy Eating and Physical Activity Policy (2015).

Other strategies are at an advanced stage of development, including those related to Mental

Health; Food reformulation; Tobacco; Food Safety; Health Enhancing Physical Activity (HEPA); Antimicrobial Resistance and Medical Genetics services. Additionally, a consultation document on a Transgender Healthcare Strategy for Malta was launched in April 2018. At the same time, there is ongoing implementation and evaluation of earlier strategies that are approaching the end of their lifespan in 2020, including the Healthy Weight for Life, Non-communicable Disease, Tuberculosis Communicable Disease and Sexual Health strategies.

In 2018, a Social Determinants Unit within the Superintendence of Public Health was set up following the award of a large European Social Funds project. The work carried out by the unit will include research, training and policy implementation, recognising the profound impact of social determinants on health.

Healthcare services

Since the launch of the NHSS, new healthcare services have been introduced, whereas established services which have been operating successfully have been expanded.

Screening: Since 2014 there has been a gradual expansion of the National Cancer Screening Programmes.

Primary care: The relocation of services from hospital to primary care is key to long-term sustainability of the health care system. This is being supported by investment in various ongoing infrastructural projects. These capital projects are being accompanied by a restructuring of elective care services away from the acute hospital, with the aim of placing more of these interventions within the community setting. The paradigm shift in care from one of hospital medical professionals' dominance to the inclusion of highly qualified health care professionals across disciplines in primary and chronic care settings has been evidenced in diabetes care in Malta, as well as other aspects of chronic illness. A range of

specialist clinics are now organised through the primary health care centres ⁽²⁷¹⁾.

Secondary and tertiary care: Several initiatives in the area of secondary and tertiary care implemented since 2014 include improvement the patient care experience.

New model for capital investment in hospitals: A public-private partnership between the public healthcare sector and an international provider was announced in 2016.

Equitable access and patient rights: Patient rights and responsibilities have been enshrined in a National Patients' Charter, launched in 2016, which sets out key rights and responsibilities of people receiving care within the Maltese health system and provides information that underpins their right to safe and high-quality care. Several initiatives to enhance provision of equitable access to healthcare have been implemented. The rights of marginalised groups and minorities were also given specific attention.

Ensuring quality of care: Concern about excessive waiting time for outpatient appointments or inpatient (e.g. elective surgical) care – which may negatively impact patient health – has led to initiatives aimed at reducing waiting lists, including a 'fast tracking' system (guided by the newly established position of 'fast-track nurse') for colonoscopy patients. Other initiatives have also contributed to a reduction in waiting list times for various services, especially for surgery. There was also an increase in acute care hospital beds from 255 per 100,000 in 2013 to 324 per 100,000 in 2015 ⁽²⁷²⁾. There are also agreements for specific surgical procedures with the private sector to increase surgical capacity and bring waiting times in line with the requirements of the Charter of Patient Rights. The efficient sourcing and supply of medicines is a particular concern for the health system. Business process re-engineering and new IT infrastructure has enabled the eradication of out-of-stock situations on a number of medicines.

⁽²⁷¹⁾ Source:
<https://deputyprimeminister.gov.mt/en/phc/Pages/Home.aspx>

⁽²⁷²⁾ Malta HSPA 2018.

Health workforce recruitment, training and specialisation: Efforts at healthcare workforce capacity building have been largely successful, with the number of physicians increasing from 346 per 100,000 in 2013 to 382 per 100,000 in 2015; and the number of nurses increasing from 744 per 100,000 in 2013 to 840 per 100,000 in 2015 ⁽²⁷³⁾.

IT systems: EU and national investment in IT and e-health infrastructures within the healthcare system have increased in recent years. The national e-health programme includes various projects planned for the period 2017– 2021, such as a 'converge' project, that aims to establish a unified e-health infrastructure, pulling together existing vertical systems, thus facilitating a national electronic health record and better intelligence for informing policy decisions; introduction of electronic card scheme and electronic prescriptions (currently being piloted) to manage patients' medicines entitlement; a revised Digital Health strategy is currently at an advanced stage of development.

Challenges

The analysis shows that a number of reforms have been implemented in recent years notably to reduce waiting times for elective surgery and to establish public health priorities. The main challenges for the Maltese health care system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades. To evaluate whether the ongoing strategy of health system reform is sufficient to cope with the challenge of future spending growth.
- To monitor health systems performance and enhance its functioning as needed.
- To continue to include more elements of activity-related payment in primary care and specialist outpatient care.
- To continue to enhance primary care provision. To make the referral system more effective and improve care coordination.

⁽²⁷³⁾ Malta HSPA; data from Eurostat.

- To investigate if additional measures regarding price regulation, expenditure control, and good prescribing practices are needed to ensure a more cost-effective use of medicines.
- To improve data collection on primary and outpatient care utilisation. To continue efforts to improve the IT infrastructure and sustain the use of health technology assessment in decision-making.
- To further enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, obesity) in various settings (at work, in school).
- To ensure acceptable standards in public-private partnership hospitals. A robust legislative and governance framework is needed to ensure careful monitoring and evaluation of this new arrangement. This would allow the regulator to assess the quality of care and value for money being provided to the population.

Table 2.19.1: Statistical Annex – Malta

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	5	5	6	6	6	7	7	7	8	8	9	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	21.9	21.7	22.5	22.1	20.6	21.3	21.1	21.3	21.5	22.5	24.2	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	3.1	1.5	3.6	2.7	-3.2	3.0	0.9	1.7	3.2	5.9	7.3	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	2.8	-3.6	-1.3	-1.1	2.6	16.7	5.4	2.6	4.4	:	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	9.0	9.1	8.5	8.2	8.3	8.3	9.6	10.0	9.9	9.8	:	10.2	10.1	10.1	10.2
Total current as % of GDP	7.1	7.4	7.1	7.6	7.9	7.9	9.1	9.4	9.3	9.1	:	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.9	1.8	1.4	0.5	0.5	0.4	0.5	0.5	0.6	0.7	:	0.9	0.6	0.2	0.3
Total per capita PPS	1,537	1,621	1,609	1,637	1,663	1,768	2,114	2,282	2,391	2,566	:	2,745	2,895	2,975	3,305
Public total as % of GDP	5.2	5.3	4.7	4.5	4.5	4.5	5.2	5.4	5.5	6.4	:	8.0	7.8	7.8	8.0
Public current as % of GDP	3.4	3.5	3.4	4.0	4.2	4.3	4.9	5.1	5.0	5.8	:	7.7	7.6	7.6	7.8
Public total per capita PPS	895	941	900	896	899	968	1,141	1,243	1,320	1,675	:	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	1.89	1.76	1.38	0.45	0.32	0.27	0.30	0.37	0.46	-0.20	:	0.2	0.2	0.2	0.2
Public as % total expenditure on health	58.2	58.1	56.0	54.8	54.1	54.8	54.0	54.5	55.2	57.5	:	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	15.0	13.9	13.6	12.1	13.5	13.6	14.0	14.2	15.1	13.8	14.1	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	:	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	28.8	29.6	31.1	32.8	31.9	32.9	30.2	29.9	30.3	28.9	:	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	502.1	503.0	505.2	508.5
Life expectancy at birth for females	81.4	82.0	82.2	82.3	82.7	83.6	83.0	83.0	84.0	84.2	84.0	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.3	77.0	77.5	77.1	77.9	79.3	78.6	78.6	79.6	79.8	79.7	76.6	77.3	77.7	77.9
Healthy life years at birth females	70.4	69.5	71.1	72.1	71.0	71.3	70.7	72.2	72.7	74.3	74.6	62.0	62.1	61.5	63.3
Healthy life years at birth males	68.6	68.3	69.2	68.8	69.4	70.1	69.9	71.5	71.6	72.3	72.6	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	78	80	76	70	72	56	158	151	125	123	110	64	138	131	127
Infant mortality rate per 1 000 live births	5.4	3.7	6.6	8.5	5.5	5.6	6.5	5.3	6.7	5.0	5.8	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	:	:	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	:	:	:	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	:	:	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.3	1.4	1.4	1.4	1.5	1.5	1.9	1.8	1.8	1.6	:	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	:	:	:	0.3	0.3	0.4	0.4
Prevention and public health services	:	:	:	:	:	:	:	:	:	:	:	0.3	0.2	0.3	0.3
Health administration and health insurance	:	:	:	:	:	:	:	:	:	:	:	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	1.8	:	:	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	:	0.2	:	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	0.7	:	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	:	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.4	:	:	0.1	0.1	0.2	0.2
Prevention and public health services	:	:	:	:	:	:	:	:	:	0.2	:	0.2	0.2	0.2	0.3
Health administration and health insurance	:	:	:	:	:	:	:	:	0.8	:	:	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.19.2: Statistical Annex - continued – Malta

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data				
	2009	2011	2013	2015												
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	:	:	29.1%	27.9%	27.1%	27.0%	
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	:	:	:	1.7%	1.7%	3.0%	3.1%	
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	:	:	26.8%	26.3%	23.7%	24.0%	
Pharmaceuticals and other medical non-durables	18.1%	19.0%	19.3%	18.7%	18.7%	18.9%	20.4%	18.9%	19.2%	18.2%	:	13.1%	12.8%	14.7%	14.6%	
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	:	:	:	3.6%	3.6%	4.1%	4.1%	
Prevention and public health services	:	:	:	:	:	:	:	:	:	:	:	2.8%	2.5%	3.0%	3.1%	
Health administration and health insurance	:	:	:	:	:	:	:	:	:	:	:	4.5%	4.3%	3.9%	3.8%	
Composition of public as % of public current health expenditure																
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	31.5%	:	33.9%	33.6%	32.1%	31.9%	
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	:	2.9%	:	1.9%	2.0%	3.4%	3.5%	
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	:	11.9%	:	22.9%	23.5%	22.2%	22.5%	
Pharmaceuticals and other medical non-durables	10.5%	11.2%	10.8%	9.9%	10.0%	9.1%	9.7%	7.3%	7.6%	6.1%	:	11.8%	11.9%	12.6%	12.7%	
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	:	7.1%	:	1.8%	1.9%	2.0%	2.1%	
Prevention and public health services	:	:	:	:	:	:	:	:	:	2.6%	:	2.9%	2.5%	3.2%	3.2%	
Health administration and health insurance	:	:	:	:	:	:	:	:	:	13.6%	:	4.1%	4.0%	3.6%	3.4%	
Expenditure drivers (technology, life style)																
MRI units per 100 000 inhabitants	:	0.74	0.73	0.73	0.72	0.72	0.48	0.72	0.94	1.17	1.16	1.0	1.4	1.5	1.9	
Angiography units per 100 000 inhabitants	:	0.5	0.7	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	
CTS per 100 000 inhabitants	:	2.5	2.7	3.2	3.1	3.1	2.9	2.9	1.9	2.1	1.9	2.1	1.9	2.1	2.3	
PET scanners per 100 000 inhabitants	:	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.1	0.1	0.2	0.2	
Proportion of the population that is obese	:	:	:	22.9	:	:	:	:	:	25.2	:	15.0	15.1	15.5	15.4	
Proportion of the population that is a regular smoker	:	:	:	19.2	:	:	:	:	:	18.9	:	23.2	22.3	21.8	20.9	
Alcohol consumption litres per capita	6.4	8.8	7.5	7.1	7.4	7.9	6.9	7.7	8.6	8.5	:	10.4	10.3	10.1	10.2	
Providers																
Practising physicians per 100 000 inhabitants	:	:	:	:	304	308	317	329	346	366	379	324	330	338	344	
Practising nurses per 100 000 inhabitants	550	561	584	643	618	647	669	669	702	798	794	837	835	825	833	
General practitioners per 100 000 inhabitants	:	:	:	72	66	67	76	80	80	81	81	77	78	78	78	
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402	
Outputs																
Doctors consultations per capita	2.6	3.6	2.6	2.4	2.5	:	:	:	:	:	:	6.2	6.2	6.2	6.3	
Hospital inpatient discharges per 100 inhabitants	8	8	7	9	11	12	14	14	14	15	15	17	16	16	16	
Day cases discharges per 100 000 inhabitants	3,461	3,458	3,427	3,578	3,957	6,759	7,145	7,639	7,763	8,454	8,612	6,362	6,584	7,143	7,635	
Acute care bed occupancy rates	87.5	89.6	80.4	78.0	82.3	81.5	83.2	83.2	80.7	81.8	81.7	77.1	76.4	76.5	76.8	
Hospital average length of stay	4.7	5.3	4.8	4.9	6.6	6.8	7.6	7.8	8.6	7.9	8.0	8.0	7.8	7.7	7.6	
Day cases as % of all hospital discharges	30.5	:	31.8	27.4	26.6	35.4	34.4	35.2	35.7	36.6	37.6	28.0	29.1	30.9	32.3	
Population and Expenditure projections																
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.			
AWG reference scenario	5.6	6.0	6.4	6.8	7.1	7.3	7.4	7.5	7.7	7.8	8.1	8.3	Malta	EU		
AWG risk scenario	5.6	6.2	6.9	7.5	8.1	8.5	8.7	8.9	9.1	9.3	9.6	9.9	2.7	0.9		
													4.3	1.6		
Note: *Excluding expenditure on medical long-term care component.													Change 2016-2070, in %			
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Malta	EU		
Population projections until 2070 (millions)	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	19.9	2.0		

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.20. THE NETHERLANDS

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

GDP per capita (35,996 PPS) in the Netherlands was well above the EU average (29,610 PPS) in 2015, with an overall increase since 2005 (34,415 PPS). Population stood at 17.0 million people in 2016 and has been increasing throughout the last decade. According to projections, the increase will continue, reaching 19.5 million in 2070.

Total and public expenditure on health

Total expenditure on health as a percentage of GDP (10.6% in 2015) has increased since 2005, when the share was 9.4%. This level is slightly above the EU-average (10.2% GDP in 2015). The same applies to public expenditure on health as a percentage of GDP, recorded as 8.5%, which is higher than the EU average for the same period (8.0% in 2015). Total (3,836 PPS in 2015) and public (3,097 PPS in 2015) per capita expenditure in 2015 were also above the EU average in the same year (respectively 3,305 PPS and 2,609 PPS). Looking at health care without long-term care⁽²⁷⁴⁾ reverses the picture, with spending going below the EU average (5.9% vs 6.8% in 2015).

Expenditure projections and fiscal sustainability

Public expenditure on health care is projected to increase by 0.8 pps of GDP ("AWG reference scenario")⁽²⁷⁵⁾, broadly in line with the projected valued of 0.9 pps for the EU. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), the increase reaches 1.4 pps of GDP from now till 2070, slightly below the EU average of 1.6 pps. The long-term fiscal sustainability risk indicator S2, which shows the adjustment effort needed to ensure that the debt-to-GDP ratio is not on an ever-increasing path, is at 3.0% of GDP. In the long term, the Netherlands therefore appears to face medium fiscal sustainability risks. This is

⁽²⁷⁴⁾ To derive this number, the aggregate HC.3 is subtracted from total health spending.

⁽²⁷⁵⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

primarily related to the projected increase in the costs of ageing where in particular the projected increase in long-term care costs contribute 2.0% of GDP to the indicator⁽²⁷⁶⁾.

Health status

Whereas life expectancy for women in 2015 was in line with the average with 83.2 years (83.3 for the EU in the same year), men live longer in the Netherlands than in the EU as a whole: 79.9 vs 77.9 in 2015. Notably, healthy life years have decreased for Dutch women, from 63.5 years in 2005, to 57.2 in 2015, which brings the Netherlands under the EU average. However this has methodological reasons⁽²⁷⁷⁾. For men the picture is slightly better. Years spent in good health are still less than in 2005 (65.4), but are with 61.1 closer to the EU average of 61.6 in 2015⁽²⁷⁸⁾.

Data show an increase in the proportion of the population which is obese (from 10.7% in 2005 to 12.8% in 2015). There has been a steady reduction of the proportion of the population that is a regular smoker, going from 25.3% in 2005 to 19% in 2015, under the EU average (20.9). Alcohol consumption is decreasing too and was in 2015 with 8 litres under the EU average (10.2 litre).

System characteristics

System financing

The healthcare system in the Netherlands is insurance based. In 2015, 80.7% of total health expenditure funding was generated from public sources.

Revenue collection mechanism

Health insurance organisations operating under the health insurance act, have the obligation to accept

⁽²⁷⁶⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽²⁷⁷⁾ The definition of Healthy Life Years used in the European Survey on Income and Living Conditions is different than that of Statistics Netherlands (CBS). CBS and the OECD instead show that the percentage of women older than 65 who feel healthy or very healthy is very stable in the Netherlands.

⁽²⁷⁸⁾ Data on life expectancy and healthy life years is from the Eurostat database.

every citizen requesting a basic health insurance. In addition, risk selection is forbidden, i.e. the insurer is not allowed to request different premiums from different clients applying for the same policy and they are obliged to accept all enrollees for all policies. As the cost profiles of the individual insured differ, a system has been set up to compensate insurers for those cost differences (risk equalisation scheme), to create a level playing field for all insurers.

The funding of statutory health insurance comes from different sources. Through their employer, citizens pay a tax-based insurance contribution, based on their income. This contribution is distributed to the different health insurers on the basis of the above described risk equalisation and counts for roughly 50% of the total revenue of the health insurers). The distribution is based on the risk profile of the population in each health insurance organisation. Indicators such as age, sex, medication use, healthcare use and socio-economic status of the insured play a role in the risk equalisation scheme. A good functioning risk equalisation scheme is vital, to prevent insurers to select citizens with a specific risk profile. The Dutch risk equalisation scheme has both ex ante and ex post risk equalisation mechanism, although ex-post measures are being cancelled. That means that insurers will run a bigger risk, but a lack of ex-post measures forms an incentive for insurers to purchase healthcare more effectively. In addition, health insurance organisations collect a nominal premium from each person insured. The level of this premium differs between health insurance organisations depending on the policy of the organisation, their internal organisation, their reserves etc. Further, as of 2016, every insured person over age 18 must pay an annual deductible of €385 (\$465) for health care costs, including costs of hospital admission and prescription drugs but excluding some services, such as GP visits. An additional source of funding that insurers receive is a state contribution for the insured under the age of 18 (10% of total revenue). Altogether, nominal premium, deductible and 18- contribution account for the remaining 50%.

Insurers collect insurance premiums and the risk-equalisation scheme between insurers applies to all funds for the basic benefit package. The content of the basic benefits package is decided on by the Ministry of Health. Private and public authorities

publish comparative standardised information on premiums, benefits, performance in claim processing and patient satisfaction. The annual switching rate of the insured between funds (the insured can decide before the beginning of each calendar year whether they want to switch health care insurer) is between 6% and 7% ⁽²⁷⁹⁾. As a general issue characterising patients choosing between alternative providers, information asymmetries, technical complexity and uncertainty as to future needs make switching between funds more difficult. In addition, four insurers account for about 90% of the market. Whether this concentration in the insurance market reduces the expected benefits of competition between insurers is unclear. It may also increase the bargaining power of insurers over care providers and pharmaceutical companies which may lead to cost-savings.

Public and total expenditure on health administration and health insurance as a percentage of GDP were broadly in line with the EU average in 2015, though slightly above (0.33% vs. 0.26% for the EU for public and 0.41 vs. 0.38% for the EU for total) which is probably due to the fact that the system is based on multiple insurers. The higher than average can be explained by the efforts to supervise costs, prices, quality, contractual terms and market developments in the health market as well as ensuring risk-equalisation and prevent risk-selection, which are necessary in the context of competition in health insurance ⁽²⁸⁰⁾.

The current healthcare system is open-ended, although the Cabinet uses annual budget projections for public spending. However, if faced with overspending, the Ministry in charge has the possibility to resort to a macro budgetary cap tool, which is de facto equivalent to a clawback/payback mechanism, whereby the excess spending needs to be returned by providers. The most influential decisions are taken at the start of the cabinet; in the (max. 4) years the cabinet is in power, adjustments are made to the path set out at the start. Note, though, that for some treatments the government still defines budgets and for other health care provision the government decides on

⁽²⁷⁹⁾

http://www.vektis.nl/downloads/Publicaties/2016/Zo_rgthermometer%20nr17/#5/z.

⁽²⁸⁰⁾ A system based on "regulated" competition inherently needs more regulatory capacity.

the remuneration methods for providers or sets prices for treatments. For the major part individual insurers negotiate prices with health care providers. Insurers also can negotiate about resource allocation / financing between sectors of care (primary care services, specialists outpatient care, hospitals current spending) and for private hospitals to decide on infrastructure and equipment. Almost all hospitals in the Netherlands are private, but not for profit. Since the healthcare system is open-ended, total health expenditure may exceed the budget-projections ⁽²⁸¹⁾. However, in the recent years expected growth of health expenditure turned out to be lower instead, but according to the Netherlands Bureau for Economic Policy Analysis (CPB) latest projections, health care expenditure is expected to increase over the period 2018-2021⁽²⁸²⁾. Possible ways to finance the expected increase of health expenditure are increasing employer taxes and health insurance premiums, or increasing cost-sharing mechanisms or removing increased interventions from the basic benefit package.

Administrative organisation: levels of government, levels and types of social security settings involved, Ministries involved, other institutions

As mentioned above, all health insurers are obliged to accept all applicants and to charge each individual applicant the same nominal premium for the same policy ⁽²⁸³⁾. For groups, the premium may differ. Applicants are free to choose an insurer. A Health Insurance Income Support scheme provides means-tested subsidies to help those below a certain income threshold (about 60% of the households receive such a subsidy) to pay for their insurance premiums ⁽²⁸⁴⁾.

⁽²⁸¹⁾ According to the OECD, The Netherlands scores 2 out of 6 in the OECD scoreboard due to the not very stringent budget controls.

⁽²⁸²⁾ In these projections, health care expenditure is rising as a percentage of GDP as the projection is based on the long-term trend excluding policy measures and on demographic developments.

⁽²⁸³⁾ The voluntary deductible can then influence the price paid for a specific policy, even though the benefits package is the same.

⁽²⁸⁴⁾ The law on the health insurance income support scheme states that no household should pay more on their health care premiums paid to insurers than a fixed percentage of their income. Any costs for health insurance premiums above this percentage are compensated through the health

Coverage (population)

Since 2006, a mandatory universal health insurance scheme operated by private health insurance funds (for profit and not-for-profit) provides 100% population coverage, through contracts with providers.

Treatment options, covered health services

The basic (but comprehensive) benefits package is fixed by law. Health insurers set a nominal community-rated insurance premium corresponding to that package.

Role of private insurance and out of pocket co-payments

In 2015, private health expenditure was about 19.3% of total health expenditure, slightly below the EU average for the same year (21.6%). Out-of-pocket expenditure ⁽²⁸⁵⁾ was 12.3% of total health expenditure in 2015. Out-of-pocket payments apply to certain services but are limited. Eyeglasses, contact lenses and certain dental prostheses, for example, are not covered by the basic benefits package. In 2008, the government introduced an annual mandatory deductible of €150 for insured people 18 and over (which has since been increased to €385 in 2017) ⁽²⁸⁶⁾. GP services ⁽²⁸⁷⁾ are exempted from the mandatory deductible, as a means to encourage primary care services vis-à-vis specialist consultations and hospital care (indeed, to be able to go to a specialist, one needs a referral from the GP). In addition, this exemption is intended not create a financial barrier for individuals to access this type of primary care, thereby supporting the role of the GP as gatekeeper in the Dutch healthcare system. Some services have recently been excluded from the basic package of care, while others have been

care allowance. In 2013 approximately 60% received an allowance.

⁽²⁸⁵⁾ Note that the €150 mandatory deductible is not included in the 5.7% out-of-pocket-payments. In 2010 the total amount of OOP caused by the mandatory deductible is nearly €1.5 billion. The actual amount of OOP is therefore higher than the 5.7% reported here.

⁽²⁸⁶⁾ By law, the deductible is periodically adjusted in line with an index for health expenditures. Households are compensated for the growth of the deductible with a tax subsidy mentioned above.

⁽²⁸⁷⁾ Other services such as maternal care, district nursing and healthcare for children up to the age of 18 are also exempted.

added⁽²⁸⁸⁾. About 84% of the population buy supplementary private insurance, though this figure seems to be declining over time⁽²⁸⁹⁾. It is possible to reinsure the mandatory deductible.

Types of providers, referral systems and patient choice

Provision is mostly private but publicly regulated. Primary care is provided by independent general practitioners (GPs), often working in private group practices⁽²⁹⁰⁾. Outpatient specialist care is provided in outpatient hospital departments. Almost all hospitals are non-profits while university hospitals are public. Providers have to establish contracts with health insurers.

The number of practising physicians per 100 000 inhabitants (347 in 2015) is in line with the EU average (344), showing a gradual increase since 2005 (271). The number of GPs per 100 000 inhabitants (82 in 2015) is slightly above the EU average (78 in 2015), with a consistent increase over the past decade (66 in 2005). The number of nurses per 100 000 inhabitants (1,047 in 2015) is well above the EU average (833 in 2015) though recording a slight decline compared with 2013 (1,210). This fits with authorities' objective, in recent years, to increase the supply of staff. The numbers above suggest that the skill mix is improving in the direction of a more primary care oriented provision (which the authorities wish to continue to pursue). Staff supply is regulated: there are quotas for medical students and for publicly financed training for medical specialties, although there is no regulation in terms of physician location. Perhaps as a result there is some concentration of medical staff in some regions/areas and staff shortages in others.

Authorities have made strong efforts to use primary care vis-à-vis specialist and hospital care. Residents have to register with a GP and there is a compulsory referral system from primary care to specialist doctors i.e. GPs act like gatekeepers to

specialist and hospital care. In addition, GP services are free. Free choice of GP is allowed but given the number of GPs and their capacity constraints, choice may be limited in some areas. Free choice of a specialist or hospital is also allowed⁽²⁹¹⁾. Moreover, authorities have planned to introduce preconditions for and stimulate the usage of ICT and e-health solutions to allow for electronic exchange of medical data (e.g. e-prescribing or e-appointments and e-health records), to support and render the referral system and care coordination more effective, reduce medical errors and increase cost-efficiency.

The number of acute care beds per 100 000 inhabitants (518 in 2015, latest available year) has decreased over time (from 690 in 2005), though remaining above the EU average until 2015 (407 and 402 for the EU in 2013 and 2015 respectively). Hospitals have autonomy to recruit medical staff and other health professionals and their remuneration level, although a pay scale is set at national level in a collective labour agreement by employers and trade unions.

Pricing, purchasing and contracting of healthcare services and remuneration mechanisms

GPs are paid a mix of a capitation (€58 per patient minimum, with increments for age and deprivation index) and a consultation fee (€) ⁽²⁹²⁾. Specialists are paid either a salary or a fee for service or a mix of the two. GPs are eligible to receive bonuses regarding their activity or performance; these bonuses may relate to all kinds of agreements between the insurer and the GP, e.g. the prescription of generics.

Hospitals are paid on the basis of DBC's, the descriptions of which are set by the Dutch Healthcare Authority (NZa), and the prices are negotiated by the hospital and the insurer. A small part (30%) is fixed and set by NZa, whereas 70% is set through negotiations between insurers and

⁽²⁸⁸⁾ Some of those removed include examples such as special chairs, allergen-free mattress covers, medication for erectile malfunction, whereas methadone treatment and treatment of dyslexia for children have been added to those included.

⁽²⁸⁹⁾ https://www.nza.nl/1048076/1048181/Marktscan_Zorgverzekeringmarkt_2015.pdf, page 51.

⁽²⁹⁰⁾ There are also a not insignificant number of salaried GPs.

⁽²⁹¹⁾ Indeed, according to the OECD, the level of choice of provider in The Netherlands has a score of about 3 out of 6, while gatekeeping scores 6 out of 6.

⁽²⁹²⁾ Note that there are also salaried GPs, most of them working for another GP.

hospitals. Hospital and mental healthcare fees are based on Diagnosis Treatment Combinations ⁽²⁹³⁾.

When looking at hospital activity, inpatient discharges, based on available figures (2012 latest) are lower than the EU average (11 in 2012 vs. 16 in 2013, and 16 in 2015 for the EU) but day case discharges, on the contrary, are significantly higher, i.e. more than double, than the EU average (16,201 in 2012 vs. 7,143 in 2013 in the EU and 7,635 in 2015). The proportion of surgical procedures conducted as day cases (60% in 2012, latest available figure) appears to be considerably higher than the EU average (30.9% in 2013 and 32.3% in 2015). Hospital average length of stay seems to be below the EU average (7.6 days in 2015), though the latest reported value is considerably outdated (6.6 in 2006 to be compared with the EU average of 8.0 in 2009). All these figures point to a high hospital throughput and high hospital efficiency ⁽²⁹⁴⁾.

The market for pharmaceutical products

Since the 1980s, the authorities have implemented a number of policies to control expenditure on pharmaceuticals. Although pricing is free there is a maximum price ⁽²⁹⁵⁾ set for each product with a given active substance, strength and formulation which is based on the prices of medicines in four reference countries (BE, DE, UK and FR) the so called external reference pricing, and (since 2004) price negotiations between healthcare insurers, pharmacists and producers ⁽²⁹⁶⁾. Externally dispensed pharmaceutical: the authorities also apply internal reference pricing ⁽²⁹⁷⁾, whereby the maximum reimbursement level of a medicine is a weighted average price of the products in each cluster of products that a medicine belongs to, using 1998 prices. New products introduced after 1998 can get a premium price if the manufacturer demonstrates cost-effective added value, and the

price of this new product becomes the maximum reimbursement level for all the products that followed and are added to the initial drug to form a cluster. Clusters of pharmaceuticals define "therapeutic equivalents", where pharmaceuticals are equivalent if they have comparable clinical characteristics, a more or less similar indication, route of administration, targeted age group and for which no clinically relevant differences in income apply. For externally dispensed pharmaceutical: only pharmaceuticals included in GVS are covered by basic health insurance - even though reimbursement may sometimes be obtained through complementary voluntary health insurance ⁽²⁹⁸⁾.

The authorities promote rational prescribing of physicians by stimulating the development of treatment guidelines, set up by medical experts, and the monitoring of prescribing behaviour. They also promote education and information campaigns on the prescription and use of medicines and regional platforms of physicians and pharmacists exist to discuss the use of medicines and improve its effective use. Some insurers have started to offer financial incentives to GPs based on efficient prescription of some drugs. Prescribing is done by active ingredient as part of medical training. A number of insurers initiated a policy of selective contracting of generic medicines; as of the 1st of July 2008, these insurers reimburse only the cheapest generic product (more precisely, those that are at the same price level as the cheapest pharmaceutical plus 5%) within a number of big-selling therapeutic classes. Producers of generics responded by substantially lowering their generic list prices. Insurers and their enrollees benefit from the system, but pharmacists may lose some revenues as a result of diminishing discounts and rebates provided by generic producers. As a result of these policies, the average prices of prescription medication have dropped considerably in the past.

Use of Health Technology Assessments and cost-benefit analysis

The National Institute for Health Research and the Health Care Insurance Board (ZiNL) conduct and

⁽²⁹³⁾ The OECD score for remuneration incentives to raise the volume of care in The Netherlands is therefore about 3.5 out of 6 as a result of the mix remuneration systems for physicians and hospitals.

⁽²⁹⁴⁾ Though this may be partly due to the broad coverage for long-term care.

⁽²⁹⁵⁾ The system was laid down in the Pricing Act of 1996.

⁽²⁹⁶⁾ A maximum price is only set for pharmaceuticals within the GVS. For pharmaceuticals which are used by medical specialists (usually for inpatient care), there is no maximum price.

⁽²⁹⁷⁾ The reference pricing system, introduced in 1993, is called the Medicine Reimbursement System (GVS).

⁽²⁹⁸⁾ Note that free choice is not excluded; if patients opt for a more expensive pharmaceutical in the same group, they have to pay the excess themselves, except if the physician decides that the more expensive one is clinically relevant for that particular individual case.

gather information on health technology assessment (HTA). Based on this HTA, the ZiNL advises the central government on what should be covered under the basic benefit package of care and the extent of reimbursement /cost-sharing in the system. It is used to determine the reimbursement of medicines and applied to new high-tech equipment, while prices are mainly set by the healthcare authority (NZa). The HTA helps defining clinical guidelines which are compulsory and to meet with effective monitoring of compliance. The ultimate decision on what should, and what should not be covered in the basic package is made by the central government. The central role of specialists in the absorption of treatment into the basic package should not be left unmentioned. New treatments or methods of diagnosis-setting adopted by medical specialists are more or less automatically covered in the basic package, since the basic package covers health care "according to the latest developments in science and technology". Only after ZiNL research shows that some methods or treatments are (cost-) ineffective the ZiNL may advise that type of treatment to be removed from the basic package.

E-health (e-prescription, e-medical records)

In the Netherlands, there is no national system for the exchange of data on e-prescription or e-medical records. The exchange of medical data is facilitated mainly on a regional level. Most of the medical records are updated electronically and are no longer available in paper. A survey shows that 93% of general practitioners and 66% of medical specialists update their records mainly or exclusively electronically. Furthermore, many doctors exchange patient data electronically. Nearly all (90%) of the general practitioners exchange patient data electronically with public pharmacies, emergency general practitioner services and hospitals. Almost half (46%) of medical specialists exchange patient data electronically with general practitioners. There are also systems which connect medical specialists or other healthcare providers who are active in the same chain of care (for example cancer or diabetes). Recently national policy has been introduced which states that the majority of chronically ill patients must have access to their own medical data (for example prescribed pharmacy), within the period 2014-2019. With this policy the Dutch government aims for more patient

empowerment, higher quality and more effective care.

Health and health-system information and reporting mechanisms

In order to improve access and reduce the waiting time for hospital surgery, authorities have obliged hospitals and mental healthcare providers to give information to an integrated central and nationwide information system on patients on a waiting list. This information can be used by insurers and their insured to choose between hospitals. The publishing of this information is designed to encourage providers to increase activity and reduce waiting times. Data on patients' experience of care is published by the government, the insurers and NGOs. This improved information transparency has certainly contributed to reduce waiting times and lists, even though the major factor was most probably the implementation of pay-per-volume systems for most health care providers.

Comprehensive data exists, which enables information on physician and hospital activity and quality and patient care utilisation to be published. This information is used by insurers and patients to choose providers and by providers to improve their own activity. Surveys are conducted on patient's experience and satisfaction with the care provided. A general health care sector performance report is published on a regular basis using a comprehensive set of indicators.

Health promotion and disease prevention policies

The central government has set a number of relevant public health objectives, set in terms of processes and the reduction of health inequalities. The ambition is to decrease or at least stabilise the difference in life expectancy by 2030 compared to now, which, given the expected developments on social determinants of health and the international position of the Netherlands, is an ambitious goal. With regards to healthy life expectancy, the ambition is that of a significant decrease in differences by 2030. The 2015 level of public expenditure on prevention and public health services as percentage of GDP is in line with the average (0.29 vs. 0.25 for the EU in 2015). In terms of total expenditure, it is a bit more

markedly above the average (3.9% vs 3.4% for EU in 2015).

Recently legislated and/or planned policy reforms

Measures to control health care costs have been implemented by the government since 2008 for acute care. The breach of the Stability and Growth Pact criteria in 2010 reinforced the government's recognition that an effective control of public costs (including health care costs) was needed. The political drive of the current government (in office since 2012) to reduce the national debt to no more than 3% of the national budget has led to significant reductions in the health care budget. The measures that have been implemented can be grouped into four categories:

- (1) shifting costs from public to private sources;
- (2) shifting costs between various statutory sources (e.g. transfer of care from the exceptional medical expenses act (AWBZ) to the municipalities), mostly in combination with major cuts in the budgets;
- (3) substitution of institutional care with home care and secondary care with primary care;
- (4) increased focus on improving efficiency and eliminating fraud.

Initially, from 2009, the measures were mainly targeted at reducing overspending, shifting costs from public to private sources by limiting the basic package and efforts to prevent improper health care consumption. From 2011 onwards, the measures focused more on structural changes in the area of acute care, with the government seeking to reach a consensus with stakeholders to agree on further cost containment.

The future policy agenda for the Dutch health system commits itself to the promotion of high quality and sustainable care. In 2011, the first outline agreements between the Minister of Health, health care providers and insurers were concluded, which form a base for less growth of healthcare consumption and more high quality healthcare. These agreements work, because the use of agreements between parties is part of Dutch political culture, and because for providers there is

always the latent threat of the government imposing measures, such as tariff cuts, when the agreed terms are not met. Also, the healthcare purchasing market provides sufficient incentives for both insurers and providers to produce healthcare of good quality at acceptable prices.

These objectives, moderate growth and improved quality of care, need to be anchored into the Dutch healthcare system. The following policy objectives will be aimed for in doing so: Primary healthcare (PHC). The Dutch healthcare system is widely known for its well-functioning PHC system. The aim is to further improve coordination between general practitioners, pharmacies, district nurses, and paramedics. Especially the district nurse will become more important; as from 2015 it will be reimbursed by the insurer (without usage will be subject to own risk), with a central role for care in districts. A central role of PHC will also make it possible for healthcare to become more patient-oriented, as more care can be provided at or near a patient's home.

Regarding innovation, this is regarded as an important feature of the system, which should remain available to patients to safeguard high quality care. New and innovative healthcare services will therefore be adopted into the basic package, under strict conditions of proven therapeutic effect and cost-efficiency. In addition, innovation has the potential to empower patients and to increase self-reliance, as well as unburden healthcare providers. Both aspects, again, make it possible for healthcare to become more patient-oriented.

On transparency, insurers need to know what the outcome of healthcare provision is, as a means of purchasing care based on quality. This also means that they are not obliged to remunerate inefficient healthcare. For the system to work efficiently, it is therefore important that everyone takes up responsibility to solely provide sensible and cost-conscious healthcare. Care provision receipts therefore need to become more understandable for patients and quality of healthcare provision will become more widely available by ZiNL⁽²⁹⁹⁾. This

⁽²⁹⁹⁾ Regarding patient information, ZiNL has set up a website support informed patient choice: kiesbeter.nl; furthermore it is also among the responsibilities of the insurer to make quality of care available to their enrollees, in a transparent and comparable manner.

will empower patients, and it also provides a base for insurers to select care providers, mainly through selective contracting of healthcare by the insurer. The effect aimed for is that non-sensible use of care will be cut back, while it can also improve safety and, again, patient-oriented healthcare.

Challenges

The analysis above shows that a wide range of reforms have been implemented over the years, to a large extent successfully (e.g. the policies to control pharmaceutical expenditure; to strengthen primary care; to reduce hospital use; to improve data collection and monitoring; and, to improve life-styles), and which The Netherlands should continue to pursue. The challenges for the Dutch health care system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades, which is a risk to the medium-term sustainability of public finances.
- To continue to enhance and better distribute primary health care services and basic specialist services to ensure equity of access and the effectiveness and efficiency of health care delivery; To ensure an effective referral systems from primary to specialist and hospital care and improving care coordination between types of care, notably by ensuring that users register with their GP and by exploring the development of electronic patient records in the future.
- To find a balance between possible economies of scale and consumer choice between providers and insurers. Possible economies of scale exist in health care provision and insurance; and the challenge is to balance these economies of scale with the need for sufficient user choice between providers/insurers, so that providers/insurers will also in the long-run optimise the mix between quality and costs.
- To ensure that the gains expected to be achieved through competition between insurers as well as providers outweigh the

administrative costs associated with the need to monitor and regulate many different dimensions of the health care market.

- To continue to improve accountability and governance of the system and identify possible cost-savings in the health sector administration. To further the existing efforts, such as financial incentives for GPs in smaller areas, to ensure that resource allocation, including that of medical staff, between regions is not detrimental to poorer regions.
- To continue to improve data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted and use to continuously improve access, quality and sustainability of care and serve as a tool of patient empowerment.
- To further the efforts to support public health priorities and enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (smoking, alcohol) and the pattern of both infectious and non-infectious diseases.

Table 2.20.1: Statistical Annex – The Netherlands

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	546	579	613	639	618	632	643	645	653	663	683	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	34.4	35.6	37.2	36.7	33.8	34.1	34.7	34.8	34.7	34.7	36.0	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	1.9	3.4	3.5	1.3	-4.3	0.9	1.2	-1.4	-0.5	1.0	1.8	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	0.9	4.2	4.3	3.1	2.7	2.1	2.1	0.7	-0.3	-1.1	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	9.4	9.2	9.3	9.5	10.3	10.4	10.5	10.9	11.0	10.9	10.6	10.2	10.1	10.1	10.2
Total current as % of GDP	9.4	9.2	9.2	9.5	10.2	10.4	10.5	10.9	10.9	10.9	10.6	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.9	0.6	0.2	0.3
Total per capita PPS	2,825	2,922	3,109	3,325	3,443	3,562	3,643	3,770	3,848	3,847	3,836	2,745	2,895	2,975	3,305
Public total as % of GDP	6.7	7.6	7.7	7.8	8.5	8.6	8.7	9.0	8.9	8.8	8.5	8.0	7.8	7.8	8.0
Public current as % of GDP	6.7	7.6	7.7	7.8	8.4	8.6	8.7	8.9	8.8	8.8	8.5	7.7	7.6	7.6	7.8
Public total per capita PPS	2,004	2,416	2,581	2,718	2,838	2,945	2,996	3,093	3,086	3,096	3,097	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.01	0.02	0.01	0.02	0.02	0.04	0.01	0.01	0.01	0.01	0.01	0.2	0.2	0.2	0.2
Public as % total expenditure on health	70.9	82.7	83.0	81.7	82.5	82.7	82.2	82.0	80.2	80.5	80.7	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	16.5	16.0	16.1	16.6	16.1	16.1	17.1	17.0	17.2	17.0	16.9	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	97.9	98.5	98.6	98.8	98.8	98.8	99.9	99.8	99.8	99.8	99.9	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	7.8	9.2	8.7	10.7	5.8	5.8	5.9	10.4	11.7	12.2	12.3	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	16.3	16.3	16.4	16.4	16.5	16.6	16.7	16.7	16.8	16.8	16.9	502.1	503.0	505.2	508.5
Life expectancy at birth for females	81.7	82.0	82.5	82.5	82.9	83.0	83.1	83.0	83.2	83.5	83.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.2	77.7	78.1	78.4	78.7	78.9	79.4	79.3	79.5	80.0	79.9	76.6	77.3	77.7	77.9
Healthy life years at birth females	63.5	63.5	64.3	59.9	60.1	60.2	59.0	58.9	57.5	59.0	57.2	62.0	62.1	61.5	63.3
Healthy life years at birth males	65.4	65.2	66.1	62.5	61.7	61.3	64.0	63.5	61.4	63.3	61.1	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	60	57	55	52	50	49	100	99	95	88	91	64	138	131	127
Infant mortality rate per 1 000 live births	4.9	4.4	4.1	3.8	3.8	3.8	3.6	3.7	3.8	3.6	3.3	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.7	2.0	1.9	1.8	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.3	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.8	2.2	2.2	2.4	:	:	:	2.8	2.8	2.8	2.7	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.4	0.4
Prevention and public health services	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.3	0.3
Health administration and health insurance	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.1	1.9	1.8	1.7	1.9	1.9	1.9	1.9	2.0	1.9	2.1	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.8	1.6	1.6	1.8	2.0	1.9	2.0	2.0	2.1	2.1	1.9	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.6	0.8	0.8	0.7	0.8	0.8	0.7	0.6	0.6	0.5	0.5	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.20.2: Statistical Annex - continued - The Netherlands

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU-latest national data				
	2009	2011	2013	2015												
Inpatient curative and rehabilitative care	28.5%	21.2%	20.2%	18.7%	19.0%	19.3%	18.7%	18.5%	19.4%	19.4%	21.2%	29.1%	27.9%	27.1%	27.0%	
Day cases curative and rehabilitative care	2.9%	2.6%	2.6%	3.2%	3.5%	3.9%	4.2%	4.4%	4.4%	4.0%	4.7%	1.7%	1.7%	3.0%	3.1%	
Out-patient curative and rehabilitative care	19.1%	24.2%	23.8%	25.4%	:	:	:	25.6%	25.9%	26.2%	25.3%	26.8%	26.3%	23.7%	24.0%	
Pharmaceuticals and other medical non-durables	10.9%	10.9%	11.0%	10.3%	10.0%	9.8%	9.5%	8.3%	7.8%	7.6%	7.8%	13.1%	12.8%	14.7%	14.6%	
Therapeutic appliances and other medical durables	4.9%	4.9%	4.8%	4.9%	4.6%	4.6%	4.8%	4.7%	4.4%	4.4%	4.8%	3.6%	3.6%	4.1%	4.1%	
Prevention and public health services	3.9%	4.2%	4.3%	4.1%	4.5%	4.4%	4.1%	3.9%	3.8%	4.0%	3.7%	2.8%	2.5%	3.0%	3.1%	
Health administration and health insurance	4.7%	5.0%	4.9%	4.3%	4.8%	4.8%	5.0%	3.9%	3.9%	4.0%	3.9%	4.5%	4.3%	3.9%	3.8%	
Composition of public as % of public current health expenditure																
Inpatient curative and rehabilitative care	31.5%	25.3%	23.7%	22.0%	21.9%	22.2%	21.7%	21.4%	22.3%	22.0%	24.4%	33.9%	33.6%	32.1%	31.9%	
Day cases curative and rehabilitative care	2.3%	2.8%	2.9%	3.5%	4.0%	4.5%	4.8%	5.0%	5.0%	4.5%	5.3%	1.9%	2.0%	3.4%	3.5%	
Out-patient curative and rehabilitative care	12.6%	21.2%	20.7%	22.7%	23.1%	22.5%	22.9%	22.8%	23.2%	23.4%	22.5%	22.9%	23.5%	22.2%	22.5%	
Pharmaceuticals and other medical non-durables	8.8%	10.8%	11.0%	9.5%	9.0%	8.8%	8.5%	7.0%	6.2%	6.2%	6.3%	11.8%	11.9%	12.6%	12.7%	
Therapeutic appliances and other medical durables	2.5%	2.8%	2.7%	2.6%	2.8%	2.8%	2.8%	2.6%	2.4%	2.4%	2.8%	1.8%	1.9%	2.0%	2.1%	
Prevention and public health services	2.8%	3.4%	3.5%	3.7%	3.8%	3.8%	3.6%	3.6%	3.4%	3.7%	3.4%	2.9%	2.5%	3.2%	3.2%	
Health administration and health insurance	3.4%	4.7%	4.7%	4.2%	3.9%	3.7%	3.8%	3.7%	3.9%	3.9%	3.9%	4.1%	4.0%	3.6%	3.4%	
Expenditure drivers (technology, life style)																
MRI units per 100 000 inhabitants	0.66	0.78	0.76	1.04	1.09	1.22	1.29	1.18	1.15	1.29	1.25	1.0	1.4	1.5	1.9	
Angiography units per 100 000 inhabitants	:	:	0.7	1.0	1.0	:	:	:	:	:	:	0.9	0.9	0.9	1.0	
CTS per 100 000 inhabitants	0.8	0.8	0.8	1.0	1.1	1.2	1.3	1.1	1.2	1.3	1.4	2.1	1.9	2.1	2.3	
PET scanners per 100 000 inhabitants	0.1	:	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.1	0.1	0.2	0.2	
Proportion of the population that is obese	10.7	11.3	11.2	11.1	11.8	11.4	11.4	12.0	11.1	12.9	12.8	15.0	15.1	15.5	15.4	
Proportion of the population that is a regular smoker	25.2	25.2	23.1	23.3	22.6	20.9	20.8	18.4	18.5	19.1	19.0	23.2	22.3	21.8	20.9	
Alcohol consumption litres per capita	9.7	9.8	9.5	9.6	9.2	9.3	9.0	9.3	8.7	8.0	8.0	10.4	10.3	10.1	10.2	
Providers																
Practising physicians per 100 000 inhabitants	271	280	279	287	292	296	313	325	331	343	347	324	330	338	344	
Practising nurses per 100 000 inhabitants	819	820	830	840	:	:	:	1190	1210	1034	1047	837	835	825	833	
General practitioners per 100 000 inhabitants	66	68	68	70	72	73	73	77	79	82	82	77	78	78	78	
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402	
Outputs																
Doctors consultations per capita	5.4	5.6	5.7	5.9	5.7	6.6	6.6	6.2	6.2	8.0	8.2	6.2	6.2	6.2	6.3	
Hospital inpatient discharges per 100 inhabitants	10	10	11	11	11	12	12	11	:	:	:	17	16	16	16	
Day cases discharges per 100 000 inhabitants	8,817	9,602	10,324	10,987	11,766	12,509	12,618	16,201	:	:	:	6,362	6,584	7,143	7,635	
Acute care bed occupancy rates	67.0	67.0	55.9	54.5	52.7	52.8	47.5	45.6	:	:	:	77.1	76.4	76.5	76.8	
Hospital average length of stay	7.2	6.6	:	:	:	:	:	:	:	:	:	8.0	7.8	7.7	7.6	
Day cases as % of all hospital discharges	46.5	48.0	49.3	50.1	51.1	51.8	51.4	60.0	:	:	:	28.0	29.1	30.9	32.3	
Population and Expenditure projections																
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.			
AWG reference scenario	6.2	6.4	6.6	6.7	6.8	6.9	6.9	7.0	7.0	7.0	7.0	7.0	Netherlands	EU		
AWG risk scenario	6.2	6.5	6.7	6.9	7.0	7.2	7.3	7.4	7.5	7.6	7.6	7.6			0.8	0.9
Note: *Excluding expenditure on medical long-term care component.															1.4	1.6
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %			
Population projections until 2070 (millions)	17.0	17.4	17.9	18.4	18.8	19.0	19.2	19.2	19.3	19.3	19.4	19.5	Netherlands	EU		
															15.1	2.0

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.21. POLAND

General context: Expenditure, fiscal sustainability, demographic trends

General statistics: GDP, GDP per capita; population

In 2015, GDP per capita in Poland was 18,500 PPS and below the EU level of 29,600 PPS. Poland remained with positive growth rates of real GDP during the crisis. In 2016, population is estimated at 38 million⁽³⁰⁰⁾. Poland's population is characterised by declining growth with an ageing population and a rising share of older age cohorts. The population is projected to decrease to 31 million until 2070.

Total and public expenditure on health as % of GDP

Total expenditure on health was at 6.6% of GDP in 2015 (EU: 10.2% in 2015). Total public spending on health was at 4.7% of GDP (EU: 8.0%). Looking at health care without long-term care⁽³⁰¹⁾ reveals a similar picture with public spending below the EU average (PL: 4.3% vs. EU: 6.8% in 2015). Spending relative to GDP was increasing steadily between 2003 and 2009 and has slightly decreased since. In 2015, 11% of total government expenditure was channelled towards health spending (EU: 15%). In per capita terms, total (1,264 PPS) and public spending (900 PPS) were well below the respective EU averages (3,305 PPS and 2,609 PPS)⁽³⁰²⁾.

Expenditure projections and fiscal sustainability

Public expenditure on health care is projected to increase by 0.8 pps of GDP ("AWG reference scenario"), below the average increase of 0.9 pps for the EU. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 1.7 pps of GDP from now till 2070 compared to the EU

average of 1.6 pps⁽³⁰³⁾. Overall, projected health care expenditure poses a risk to the long-term sustainability of public finances. There are no short-term risks and the medium-term risks are low. Over the long run, however Poland does face medium risks to fiscal sustainability. These risks are largely due to an unfavourable initial budgetary position, but also to the necessity to meet future increases in ageing costs (notably healthcare and long-term care)⁽³⁰⁴⁾.

Health status

In 2015 life expectancy at birth was 81.6 years for women and 73.5 years for men, below the EU averages (EU: 83.3 for women and 77.9 for men). However, in 2015 healthy life years were slightly at the EU average for women (63.2 vs. 63.3 years), but below the EU average for men (60.1 vs. 62.6 years). Amenable mortality rates, i.e. deaths that should not occur with timely and effective care, are well above the EU average (169 deaths in Poland versus 127 deaths in the EU per 100,000 inhabitants). Infant mortality was at the level of 4.0‰ in 2015 (EU: 3.6‰).

System characteristics

Administrative organisation, system financing, revenue collection mechanism

The health care system in Poland is described by two basic acts. Details of the operation of general health insurance system are defined by the Act of 27 August 2004 on healthcare services financed from public funds. The insurer is the National Health Fund (NHF). Rules pertaining to therapeutic activity in Poland are regulated by the Act of 15 April 2011 on therapeutic activity. The act defines the rules for the therapeutic activity, in particular the conditions to be met by entities carrying out therapeutic activity, as well as the categories of entities and kinds of therapeutic activity.

Since 2003, a centralised National Health Fund (NHF) manages the financial resources and

⁽³⁰⁰⁾ According to the Central Statistical Office of Poland, the population on 31st June 2015 was 38.45 million.

⁽³⁰¹⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽³⁰²⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to EUROSTAT data series, which reflect current expenditure only.

⁽³⁰³⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽³⁰⁴⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

allocates them between providers based on individual contracts. Moreover, in 1990 the Agricultural Social Insurance Fund was established in order to perform tasks connected with full servicing of farmers' social insurance⁽³⁰⁵⁾.

Funds are coming mostly from universal health insurance contributions collected by the NHF. Moreover, government budgets (state, regional or local authorities) contribute for specified purposes, such as health insurance contributions for specific groups of the population (e.g. unemployed receiving social security benefits, persons receiving social pensions, farmers, war veterans, etc.), capital expenditure in public health care institutions, highly specialised tertiary care procedures (such as organ transplants, heart surgery, treatments abroad) and very expensive drugs (in total around 10%).

The NHF contributions are calculated on the gross income base, which makes it a sort of earmarked type of personal income tax (PIT). The base differs slightly for some defined social groups: farmers (depending on the size of the farm), self-employed (depending on income, but with a lower limit) and beneficiaries of social security (depending on the gross amount of benefits). The contribution rate amounts currently to 9% of the base, 7.75% of which are subtracted from PIT and 1.25% are paid directly by the insured person.

In 2011, a major reform was introduced allowing for the possibility of direct transformation of public health care units, including public hospitals into corporate units (corporatisation). The law regulates that both public and private hospitals contracted by NHF will function according to the same rules. Also public hospitals that were transformed into corporate units will be allowed to

offer for fees services outside the contracts with NHF⁽³⁰⁶⁾.

The laws' purpose is to increase the efficiency of health care providers and thus improve the functioning of health care system. If the financial report on public hospital activity indicates a net loss, then hospital or his owner has 3 months to cover it. Otherwise, the owner makes a decision: transformation into corporate unit or liquidation. Since July 2011, 62 public hospitals were corporatised (one of them was privatised)⁽³⁰⁷⁾. It will be interesting to observe the law's further impact in the coming years.

Coverage and role of private insurance and out of pocket co-payments

Public health insurance covers 91.6% of the population⁽³⁰⁸⁾. Practically all social groups are covered by mandatory health insurance. There is no legal possibility to opt-out from the system on the grounds of income, social group or source of means of living. The law identifies the package of health services provided under the insurance scheme, as well as a limited list of excluded services. A number of services, defined by law, are provided with co-payments. The level of co-payments is legally limited and depends on the income of an insured person⁽³⁰⁹⁾. For dental care, a precise system of point pricing with respect to a standard basket of dental procedures and materials is established⁽³¹⁰⁾.

⁽³⁰⁵⁾The main regulation defining farmers' social insurance obligations and entitlements to benefits is the act of 20 December 1990 on social insurance for farmers. The current regulation of farmer's health insurance is included in the act of 2 December 2016 to amend the act on healthcare services financed from public funds (pol. ustawa z 2 grudnia 2016 r. o zmianie ustawy o świadczeniach opieki zdrowotnej finansowanych ze środków publicznych).

⁽³⁰⁶⁾Please, notice that the Act of 15 April 2011 on medical activity regulates the transformations of public independent health care provider (pol. samodzielny publiczny zakład opieki zdrowotnej (SPZOZ) – specific name for health care provider). In accordance with this act, if the health care provider is not able to finance its own deficit, then its founder can defray the negative balance or is obliged to transform this provider into corporate unit (or budgetary unit) or decide on liquidation of the unprofitable provider.

⁽³⁰⁷⁾By today, 191 hospitals have changed their organizational form (into corporate unit). Majority of them, (ca. 70%.) are owned or controlled by public body (mainly local government).

⁽³⁰⁸⁾The guaranteed benefit baskets are stored in the regulations of the Minister of Health, not in the act.

⁽³⁰⁹⁾Only charges for accommodation and catering in the care and treatment facility, nursing and care facility or in medical rehabilitation facility that provides twenty-four hour services are dependent on the income.

⁽³¹⁰⁾As a result, Poland scores about 5.9 out of 6 on the breadth, 6 in the scope and around 5.3 on the depth of basic coverage according to the OECD scoreboard.

Shares of public and private expenditure in total health care spending have been stable over the last decade: 71% of expenditure being publicly and 29% privately financed in 2015 (EU: 78% public and 22% private). As such, health financing is based to a higher degree on private sources than in other EU countries. Out-of-pocket spending accounts for a large majority of private expenditure (23.3% of total current expenditure on health in 2015; EU: 15.9%). As there are no patient charges for medical treatment by general practitioners, specialists or in hospitals, private co-payments are foremost for outpatient pharmaceuticals. This suggests a relative underdevelopment of other, more institutionalised patterns of financing (such as supplementary insurance schemes).

Private expenditure also includes the pre-payment schemes, of which main components are "medical subscriptions" and different insurance policies protecting against the risk of high expenditures on health care. The former ones are mainly the expanded packages of health services offered by employers to their employees. They usually include services that the employers are obliged to provide in accordance with law and cover mostly outpatients services. The latter ones are still in the early stage of development and concern a minor number of patients.

Types of providers, referral systems and patient choice

Health care services are provided by public and non-public therapeutic entities and private medical practitioners (individual or group medical practice). All providers are independent in terms of organisation, personnel, assets and finances.

Primary health care is provided in outpatient clinics and at home (with doctors obliged to provide home services when required for medical reasons). Family physicians (or general practitioners – GPs) act as gatekeepers for specialist and hospital care. Patients have a free choice of the GP, with a limited number of changes available per year. Also, there is free choice of and direct access to certain specialists (e.g. gynaecologists, psychiatrists, oncologists, dentist and venereologist). Specialist outpatient care is based mostly on private medical practices or specialised health centres (mainly in the big

cities), which developed on the basis of the former public specialised health care centres. Inpatient hospital care is provided predominantly in public hospitals. The number of non-public hospitals increased over the last decade (428 private hospitals of 1013 in 2016). In terms of the number of hospital beds the public sector dominates. Private hospitals are relatively small in size and have fewer beds.

While the insurance coverage should practically be universal, the supply of health care is seemingly not sufficient to provide the whole population with timely and adequate care. The number of practising physicians per 100,000 inhabitants (233 in 2015) is one of the lowest in the EU (EU: 344). The same is true for GPs (22 per 100,000 inhabitants in Poland vs. 78 in the EU in 2015). The number of nurses is also low (520 per 100,000 inhabitants in 2015), and below the EU average of 833. Staff shortages are particularly perceptible in some regions and for some specialisations as the regional and sub-sectorial discrepancies in care availability are significant.

A characteristic feature of the Polish health care system is the widespread phenomenon of double (or multiple) employment: physicians keep part-time salaried job in (mostly public) health care units and simultaneously act as individual medical practitioners. Indeed, only for a small minority of individual practitioners (with the exception of dentists) this occupation is reported as their main or only job. Such practice may have a strong negative effect on the quality of services provided by the health care units and their economic situation, as their equipment and facilities are often used by the physicians for their secondary activities.

Total expenditure on inpatient care as a % of GDP was below the EU average (2.2% vs. 2.8% in 2015), as was public expenditure (2.0% vs. 2.5% in 2015). Inpatient care accounts for roughly 46% of public expenditure on health in Poland compared to 32% in the EU. High expenditure may be a sign of a health system, which is oriented away from ambulatory and towards hospital care, providing potential to increase the relative cost-effectiveness of care, by shifting away from hospital centric health care provision.

The capacity of Polish hospitals (491 beds per 100,000 inhabitants in 2015) is higher than the EU average of 402, while the average length of stay with 7.3 days in 2015 is below the EU average of 7.6 days. However, the number of hospital inpatient discharges increased from 14 in 2005 to 16 in 2015 per 100 inhabitants (EU: 16 in 2015).

Total and public expenditure on outpatient care as a % of GDP were below the EU average (1.5% and 0.8% vs. 2.4% and 1.8% in 2015). Total and public expenditure on outpatient care as a % of current health expenditure were roughly around the EU average (23% and 18% vs. 24% and 22.5% in 2015).

Physicians employed by the health care units can be remunerated according to a number of contractual arrangements, although salary is the most widespread pattern. Individually practising physicians are generally paid according to the capitation principle, on the basis of patient lists.

Hospitals are financed on the basis of contracts concluded between individual entities and the National Health Fund. A uniform classification of hospital services, mainly based on defining individual groups of procedures and prices for basic units serves as a basis for those contracts.

The market for pharmaceutical products

The pharmaceutical market in Poland is divided into two segments: open (through pharmacies) and closed (through hospitals) markets. Over the last decade, the value of drugs sold has increased in both markets, while the quantity has decreased in hospitals and remained stable in pharmacies. These developments suggest a sharp increase in the average price of hospital drugs, driven mainly by a growing use of original drugs. In the open market, the shares of reimbursed and over-the-counter (OTC) drugs were broadly equal until 2004. Since then a significant increase in the quantity of prescribed and reimbursed drugs has exceeded significantly that of the OTC drugs. However, in terms of value the gap between the growth rates of the two groups has been much narrower, which suggests a much higher price dynamics of the OTC pharmaceuticals, resulting from high effectiveness of advertising campaigns and insufficient competition between the OTC drugs producers. More detailed analysis of the structure of

pharmaceutical market allows observing the increase in the share of imported drugs, linked to the fall in their relative price, as well as the growth in the total value of sold generics, driven mainly by the relative increase in their prices, rather than quantities sold.

New drug reimbursement regulations and changes to the official list of subsidised drugs have been introduced in 2012. Now the Ministry of Health can negotiate the fixed refundable price of a drug directly with manufacturers. Thus, prices of reimbursed drugs are identical in all pharmacies. Under the reimbursement law, the list is updated every two months.

Use of Health Technology Assessments and cost-benefit analysis

The Centre for Health Care Quality Monitoring provides independent accreditation on the basis of a published set of standards. Quality requirements, national guidelines and standards are developed based on independent expertise. Further schemes include developing a better system to evaluate services. The use of technology assessment is increasing, leading to evidence-based contracting of services.

The Agency for Health Technology Assessment and Tariff System was established in 2005 as an advisory body to the Ministry of Health. It is responsible for preparing health technology assessment reports, collecting information on health technology assessment results and methodologies. The main task of the agency is to prepare for the Minister of Health recommendations on financing all health care services from public funds (especially in relation to drug reimbursement list, national and local government health care programs, therapeutic drugs programs (high-cost, innovative drugs) and hospital's chemotherapy drugs list).

E-health (e-prescription, e-medical records)

In 2013, an electronic verification of beneficiaries' rights was introduced (so-called eWUŚ system). This allows for verification whether the person is entitled to benefits financed from public means. Also an individual health e-account (so-called ZIP) was introduced in July 2013, on which the insurers' data are collected.

The following legal regulations were adopted aiming at the modernisation of the current system of gathering, processing and usage of information in healthcare. Those regulations are deriving from the Act of 28 April 2011 on information system in healthcare. The act and its implementing legislation provide the legal framework for the functioning of information systems in healthcare. It is also a foundation for implementation of solutions supporting the exchange of medical data, which need to be used in treatment process in Poland. Under this act there are IT solutions being developed currently, through which it will be possible to prepare tools for implementation of healthcare information as well as to conduct electronic medical records (documentation) in medical entities.

Currently, the following projects are ongoing:

1. Electronic Platform for Collection, Analysis and Dissemination of Digital Resources on Medical Events (P1). Information systems which will be launched within this project will become electronic platform of medical data. The aim of this project is to build an electronic platform for public services in healthcare, enabling different stakeholders to collect, analyse and share their digital resources on medical events. The project includes the necessity to ensure appropriate level of security as regards data and services. Due to high sensitivity of data being processed (medical data), feeding the data, as well as their processing will be done with the full knowledge of patient, in compliance with the required security and confidentiality measures. Projects allow to implement ePrescription, referral, Online Patient Account as well as to exchange electronic medical documentation. The platform will be connected with local information systems of healthcare providers and with the data being processed, which makes the functioning of the system to be liable to high requirements of security level.
2. Domain-specific information and communication systems in healthcare (P4) – the project will enable building and implementation of information and communication systems supporting specific business areas, as follows: Healthcare Statistics System; Risks Monitoring System;

Integrated System of Monitoring Trade in Medicinal Products; System Monitoring Education Medical Professionals, System of Registration of Healthcare Resources.

3. Platform P2, i.e. Platform for sharing services and resources of digital medical records with on-line businesses was established and launched at the beginning of 2013. P2 platform is a universal IT tool used to keep registers and provide electronic services. P2 platform enables electronic registration and updating of register data (e.g. it is possible to apply for permission to run a pharmacy), gives healthcare providers the opportunity to submit their applications to the register electronically, to keep documents in electronic form, provides wider usage if digital signature and assists public administration in downloading registry data. During integration with the P2 platform the registers are rebuilt so that they are consistent with the reference architecture of a medical register. The following registers were integrated with the P2 platform: Register of permits for running commonly available pharmacies, pharmacy points and Register of permits for running hospital pharmacies, company pharmacies as well as hospital pharmacy departments; Register of permits for running pharmaceutical warehouses; Coding Systems Register; Register of Medicinal Products Authorised for the Market on the territory of the Republic of Poland; Register of Medically Assisted Procreation; Residency IT System (SIR).

Full operation of the system will be possible when the above mentioned projects are finalised.

Feeding the system with medical data and electronic medical documentation is the vital requirement for full operation of the system. For this purpose healthcare providers were obliged to keep medical documentation in electronic form starting from 1 January 2018. Until that time healthcare providers can develop and process medical documentation in traditional (paper) form as well as in electronic one. Due to the solution implemented in Poland as regards exchange of medical documentation, medical documentation will be held by healthcare providers in the information and communication system and its dissemination will be possible through Medical

Information System (MIS), i.e. P1 platform, mentioned above. Healthcare provider will feed into MIS the data or medical electronic documents possible to be downloaded by other healthcare provider when necessary for the continuity of treatment and providing patients with medical products and devices. Sharing the data is possible only with the consent of patient. E-prescription and e-referral will be specific documents available during data sharing. It will be possible to provide those documents within P1 platform directly, through special application.

As mentioned above, the computerisation of healthcare system in Poland is developing dynamically. In accordance with current regulations, healthcare information system will eventually include databases functioning within:

Medical Information System (MIS), which is information and communication system used for processing data on provided, being provided and planned healthcare services shared by healthcare providers' information and communication systems, domain-specific information and communication systems (Register of Medical Services System of the National Health Fund, Healthcare Statistics System, System of Registration of Health Resources, Risks Monitoring System, Accessibility to health care services Monitoring System, Register of Medicinal Products Authorised for the Market on the territory of the Republic of Poland, Integrated System of Monitoring Trade in Medicinal Products, System Monitoring Education Medical Professionals, Reimbursement List Operation System) and Medical registers.

Health and health-system information and reporting mechanisms

The collection and processing of statistical data on health care is governed by the Council of Ministers on the programme of statistical surveys. In 2016, as well as planned for 2017, the program foresees the following tests, which consist of dozens of statistical forms, as e.g. health's status of the population, health's monitoring, hospitalisation, prevention, vaccination, economic aspects of health care, the National Health Account and others. A separate branch of IT-systems is used by the National Health Fund as the primary payer. These systems include E-health (e-prescription, e-

medical records, e-referrals), a system for billing services, in which data are collected both on the number of benefits, types of benefits and costs of benefits. Together with the characteristics of patients (age, sex, region) this creates a comprehensive source of information for an effective allocation of resources.

Health promotion and disease prevention policies

Public health has gained a large momentum in 2015. The Parliament adopted the law on public health (from September 11th), which entered into force in December 2015. According to this legislation new governance, inter-ministerial coordination and financing mechanisms are in place. Overall spending on public health programmes will increase in 2016, compared to 2015. Before 2016 total and public expenditure on prevention and public health services as a % of GDP were below the EU average (0.2% and 0.1% vs. 0.3% and 0.3% in the EU). Public and total expenditure on prevention and public health services as a % of current health expenditure were slightly below the EU average (2.7% and 2.7% in Poland vs. 3.1% and 3.2% in the EU in 2015).

Transparency and corruption

Regarding anti-corruption regulations in the functioning of the Ministry of Health, this area is particularly vulnerable to issues of lobbying, informal pressures and corruption proposals in meetings with external stakeholders, in particular with representatives of the pharmaceutical industry involved in creating the list of reimbursed drugs. In view of the need to normalise the above mentioned contacts, a special procedure was adopted on how to receive visitors in the Ministry of Health. The procedure provides transparency rules for meetings with external stakeholders, especially in the context of possible lobbying activities. The Ministry of Health collaborates with the European Healthcare and Corruption Network (EHFCN) since 2006. This cooperation relies mainly on exchange of experiences, information, data and best practices. The Network is the only international organisation in Europe, dedicated to combating corruption, fraud and losses in health care systems. The Ministry of Health also took part in the awareness-raising campaign organised by the EHFCN, the aim of which was to show the

scale of corruption in the healthcare sector in Europe, by pointing to what the lost funds could be allocated due to fraud and corruption in health. The Ministry of Health takes part in the implementation of the “Government Anti-Corruption Programme for years 2014-2019”, aiming at reducing the level of corruption in Poland.

Recently legislated and/or planned policy reforms

Since 2012, many amendments have been made to basic governance laws of the health care insurance system. These related to the provision of health care services include: 1) Changes in the contracting of health care services by the National Health Fund – with emphasis on the complexity of the services and experience of service provider; 2) Changes in primary health care - by changing eligibility requirements for doctors which could serve as a family physician; 3) Changes in the financing of cross-border treatment in a State other than the Member State of affiliation - implementation of EU legislation.

Related to pharmaceuticals, the reimbursement system was changed. Medicinal products are reimbursed on the basis of administrative decision issued by the Minister of Health. Furthermore, the system of fixed prices and margins was introduced.

In 2015, the Act on public health was adopted. It defines specific tasks of public health and indicates institutions involved in providing these tasks and rules of financing these activities. The act promotes health and enhances the disease prevention activities. The baseline for implementation of these tasks is the National Health Programme.

An amendment to the provisions of the Act on health care services financed from public funds has been adopted. It sets a minimum amount of public expenditure on financing health care in the upcoming years. According to the current regulations, public expenditure on health care is to be increased every year, to reach at least 6% of GDP in 2024. Next, the amendment included the possibility of special supplement payments to doctors, who specialise in primary care and make a commitment to work in Poland for a certain period after completion of their training and settled

minimum wages for specialists who meet the formulated in the act criteria.

Moreover, changes to the Act on healthcare services financed from public funds introduced in 2017 a new legal institution in the form of a basic hospital security system for healthcare services, which became the main form of securing access to healthcare services in the field of hospital treatment and outpatient care specialist carried out at hospital outpatient clinics. In the scope of services covered by the contract concluded under the security system, a new form of settling the costs of benefits provided was accepted, in the form of a lump sum for a given settlement period.

From 2016 onwards, people aged 75 or more receive certain medicines, foodstuffs for particular nutritional purposes and medical devices included in the reimbursement list of the Ministry of Health for free.

Pharmacovigilance - a key element of the adopted amendments has remodelled the definition of "adverse reaction of medicinal product". It has basically expanded the group of people entitled to report adverse reaction of pharmaceuticals (for instant: patients, nurses, midwives, paramedics, laboratory diagnosticians), introduced possible requirements for post-authorisation studies and obligation to report adverse reaction to EudraVigilance by stakeholders.

Moreover, the obligation to pay health insurance premiums by farmers operating in farms over 6 acres conversion was introduced. Until the adoption of the Act, for all farmers, premiums were paid from the state budget. In 2018, the provisions of the Act amending the act on social insurance for farmers and some other acts that regulate the issue of social security for farmers' helpers at harvest on an agricultural holding by introducing a new type of civil law agreement came into force. Farmers have to health insurance premiums for farmer's assistants performing at their farm activities specified in the aid agreement at harvest.

The Ministry of Health prepared a Regional Healthcare Needs Maps of Poland in order to analyse current and projected demographic trends and the health status of the society. The analysis was conducted at a regional level with respect to

available healthcare resources and infrastructure, identifying needs for policy reform. Regional Healthcare Needs Maps of Poland are created for each voivodeship and includes projections of healthcare needs of the society at a county and voivodeship level. These documents provide the basis for the Healthcare Needs Map of Poland, which additionally contains analysis of healthcare provided at national level (ex.: transplantology). This approach identifies fields of the healthcare system, which require coordinated intervention of more than one voivode or appropriate State authorities. Identified priorities for healthcare policy at regional level and Regional Healthcare Needs Maps of Poland should be taken into account by the National Health Fund at the process of contracting of healthcare providers. This should lead to more rational financing of healthcare investments and healthcare system, decrease the risk of strictly arbitral decisions and increase the transparency of the system. Until the end of 2015 Healthcare Needs Maps in the fields of oncology and cardiology were prepared.

In addition, in 2015 the Ministry of Health introduced fast-track waiting lists for cancer patients. They are now guaranteed diagnostics and treatment within specified times, and there are no financing limits for treatment. Health care providers, who ensure timeliness and comprehensiveness of health care services, face no financing ceilings.

In 2016, a new instrument was introduced to the health care system that enables proper assessment of investment projects before their implementation. Evaluation of the purposefulness of the investment is made on the basis of a questionnaire covering several criteria, including the implementation of maps of health needs and priorities for regional health policy, taking into account the desired directions of development of health care in Poland. The provisions concerning the Investment Applications Assessment Instrument in Health Care were amended in 2018, among others expanding the scope of entities that can apply for issuing an opinion as well as the types of investments that are the subject of these opinions.

In 2017, the Act on basic health care was passed, the provisions of which are to improve the organisation and functioning of basic health care, as well as create conditions for increasing its

effectiveness. In particular, it is important to improve the coordination of care and teamwork in the field of the separate competences of primary care physicians, primary care nurses and midwives, and in particular the improvement of the organisation of patient care management. By the end of 2019 a pilot programme for "Preparation, testing and implementation of coordinated care organisation in the healthcare system" will be completed.

In 2018, the Act amending the act on the information system in health care and certain other acts were adopted. Together they constitute a comprehensive legal regulation regarding the Patient's Internet Account. Thanks to this solution, beneficiaries will have access to, among others, information on the provided and planned healthcare services collected in the Medical Information System, reports on the sharing of data concerning them and the amount of public funds spent on financing the healthcare services provided.

The Act on State Emergency Medical Services was amended in 2018 to transfer to the Minister of Health the maintenance and technical service of the System for Supporting Command of the State Medical Rescue, previously implemented by the Minister of Public Administration.

Challenges

The Polish government has continued in recent years to tackle the pervasive inefficiencies of the health system. The main challenges for the Polish health system currently are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades, as this is a risk to the long-term sustainability of public finances.
- To improve the basis for more sustainable and larger financing of health care in the future. This can improve access and quality of care and its distribution between population groups and regional areas.
- To develop a comprehensive human resources strategy that tackles spatial/regional disparities,

ensures sufficient numbers of staff in general, aims at increasing the number of general practitioners relative to specialist clinicians, and in the future in view of staff and population ageing and motivates and retains staff to the sector and to the country.

- To foster the reallocation of resources aiming at reducing the high share of spending on inpatient care and increasing the relatively low share of spending on typically more on outpatient care services.
- To strengthen the role of primary health care within the system and that of general practitioners in their role as gatekeepers.
- To carry out the mapping of health care needs aiming at identifying priorities for resources re-allocation and serving as a basis for investments in the health system.
- To tackle the multiple employment phenomenon, affecting accessibility and quality of public health services, and the widespread illegal use of public equipment and facilities by the individual practitioners.
- To pursue the restructuring and reorganisation of the hospital sector, aiming at rationalising existing hospital bed capacity and improving the cost-efficiency within hospitals, ensuring that care is provided in the most clinically appropriate and cost-effective way, for example by maximising the proportion of elective care provided on a day case basis, day-of-surgery admission; to closely monitor the effects on access to and quality of care related to possibility of voluntary transformation of public hospitals into corporate units (corporatisation).
- To foster a wide use of Health Technology Assessment and information and communication technologies in health care.
- To enhance health promotion and disease prevention activities, promoting disease screening given the most recent pattern of risk factors (circulatory system diseases, cancers).

Table 2.21.1: Statistical Annex – Poland

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	246	275	314	366	317	362	380	389	395	411	430	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	13.7	14.2	15.2	15.3	14.8	15.9	16.5	16.8	16.9	17.5	18.5	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	3.5	6.3	7.1	4.2	1.8	3.5	5.0	1.6	1.5	3.3	3.9	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	4.7	8.3	13.4	5.3	0.8	2.2	4.1	-1.6	0.9	5.4	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	6.3	6.2	6.3	6.8	7.1	6.9	6.7	6.9	6.7	6.5	6.6	10.2	10.1	10.1	10.2
Total current as % of GDP	6.1	6.0	5.9	5.8	5.8	5.9	6.4	6.6	6.4	6.3	6.3	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.2	0.2	0.4	1.0	1.3	1.0	0.3	0.3	0.3	0.3	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	689	756	875	1,111	995	1,109	1,134	1,189	1,169	1,191	1,264	2,745	2,895	2,975	3,305
Public total as % of GDP	4.2	4.3	4.4	5.0	5.1	5.0	4.8	4.7	4.8	4.7	4.7	8.0	7.8	7.8	8.0
Public current as % of GDP	4.0	4.1	4.2	4.6	4.8	4.7	4.5	4.4	4.5	4.4	4.4	7.7	7.6	7.6	7.8
Public total per capita PPS	464	523	614	808	723	811	817	816	839	856	900	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.23	0.24	0.26	0.36	0.31	0.34	0.30	0.28	0.28	0.25	0.26	0.2	0.2	0.2	0.2
Public as % total expenditure on health	67.3	69.2	70.2	72.7	72.6	73.1	72.1	68.6	71.8	71.9	71.2	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	11.5	11.3	13.3	9.7	12.4	10.6	10.6	10.8	11.2	10.8	11.0	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	97.3	99.3	98.1	97.8	97.8	97.8	96.6	91.0	91.6	91.3	91.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	27.8	27.1	26.3	24.4	24.4	23.7	24.0	24.3	23.7	23.1	23.3	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	38.2	38.2	38.1	38.1	38.1	38.0	38.1	38.1	38.1	38.0	38.0	502.1	503.0	505.2	508.5
Life expectancy at birth for females	79.3	79.7	79.8	80.0	80.1	80.7	81.1	81.1	81.2	81.7	81.6	82.6	83.1	83.3	83.3
Life expectancy at birth for males	70.8	70.9	71.0	71.3	71.5	72.2	72.5	72.6	73.0	73.7	73.5	76.6	77.3	77.7	77.9
Healthy life years at birth females	66.9	62.9	61.5	63.0	62.5	62.3	63.3	62.8	62.7	62.7	63.2	62.0	62.1	61.5	63.3
Healthy life years at birth males	61.2	58.4	57.6	58.6	58.3	58.5	59.1	59.1	59.2	59.8	60.1	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	102	97	94	91	87	83	197	192	184	170	169	64	138	131	127
Infant mortality rate per 1 000 live births	6.4	6.0	6.0	5.6	5.6	5.0	4.7	4.6	4.6	4.2	4.0	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.8	1.8	1.9	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.2	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.1	1.2	1.2	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.7	1.7	1.6	1.6	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.7	1.7	1.8	2.1	2.2	2.1	2.0	2.0	2.1	2.0	2.0	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.6	0.7	0.7	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.5	0.5	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.21.2: Statistical Annex - continued - Poland

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	29.0%	30.0%	32.5%	37.4%	38.4%	37.5%	33.1%	32.0%	33.7%	33.8%	33.9%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	1.9%	1.6%	1.8%	2.2%	2.4%	2.5%	2.2%	2.0%	2.2%	2.2%	2.2%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	18.6%	19.5%	20.6%	23.6%	25.7%	24.2%	22.0%	21.9%	22.1%	22.4%	23.2%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	28.6%	28.3%	26.8%	27.2%	28.4%	27.1%	24.2%	21.4%	21.6%	21.4%	21.0%	13.1%	12.6%	14.7%	14.6%
Therapeutic appliances and other medical durables	2.6%	2.7%	2.9%	3.1%	2.8%	2.4%	2.2%	2.3%	2.2%	2.4%	2.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.3%	2.3%	2.4%	2.6%	2.8%	2.4%	2.2%	2.0%	2.5%	2.7%	2.7%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.5%	1.5%	2.0%	1.9%	1.7%	1.5%	1.7%	1.2%	2.7%	2.2%	1.6%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	42.3%	42.7%	44.3%	45.6%	44.6%	45.0%	44.4%	45.6%	45.6%	45.5%	45.9%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	2.8%	2.4%	2.5%	2.8%	2.9%	3.0%	3.0%	3.0%	2.9%	2.9%	2.9%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	15.9%	16.3%	16.9%	17.8%	18.9%	17.7%	17.7%	18.5%	18.0%	17.9%	18.0%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	16.4%	16.0%	14.2%	13.2%	13.3%	13.4%	13.5%	10.6%	9.8%	10.2%	10.1%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.7%	2.0%	1.9%	1.7%	1.2%	1.1%	1.1%	1.4%	1.3%	1.4%	1.6%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	2.5%	2.5%	2.4%	2.2%	2.1%	2.1%	2.0%	2.0%	2.7%	2.7%	2.7%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	2.2%	2.2%	2.9%	2.4%	2.1%	1.9%	2.2%	1.8%	3.8%	3.2%	2.3%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.20	0.19	0.27	0.29	0.37	0.47	0.48	0.55	0.68	0.66	0.76	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	0.7	0.8	0.9	1.0	1.1	1.1	1.1	1.2	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	0.8	0.9	1.0	1.1	1.2	1.4	1.3	1.5	1.7	1.6	1.7	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	16.4	15.8	:	:	:	:	16.7	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	:	:	23.8	23.8	:	:	:	:	22.7	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	9.5	10.4	10.9	11.4	10.7	10.6	10.9	10.8	11.6	10.7	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	214	218	219	216	217	217	219	223	224	231	233	324	330	338	344
Practising nurses per 100 000 inhabitants	509	509	518	519	525	524	521	:	527	524	520	837	835	825	833
General practitioners per 100 000 inhabitants	14	14	16	22	21	21	20	22	22	22	22	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	6.3	6.6	6.8	6.8	6.8	6.6	6.8	7.0	7.1	7.2	7.4	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	14	14	14	14	16	15	16	:	16	17	16	17	16	16	16
Day cases discharges per 100 000 inhabitants	2,105	2,685	2,818	2,894	3,770	4,050	4,362	:	4,328	4,547	4,437	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	7.9	7.6	7.8	7.9	7.7	7.6	7.4	7.1	7.0	6.9	7.3	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	13.7	16.2	17.2	:	19.4	20.7	21.8	:	21.1	21.5	21.0	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	4.3	4.3	4.4	4.5	4.7	4.8	4.9	5.0	5.1	5.2	5.2	5.2	Poland	EU	
AWG risk scenario	4.3	4.5	4.7	4.9	5.2	5.4	5.6	5.8	5.9	6.0	6.1	6.0	0.8	0.9	
													1.7	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	38.0	37.9	37.7	37.2	36.6	35.8	35.1	34.4	33.6	32.8	32.0	31.0	Poland	EU	
													-18.4	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.22. PORTUGAL

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

In 2015, Portugal's GDP was around €180 bn or 21,400 PPS per capita, below the EU average GDP per capita of €29,600. The population of Portugal is estimated to be around 10 million inhabitants in 2016. Over the coming decades it is projected to fall gradually to 8.0 by 2070. This decrease of 23% contrasts with the expected increase of 2% for the EU as a whole.

Total and public expenditure on health as % of GDP

Total expenditure ⁽³¹¹⁾ on health as a percentage of GDP (9.1% in 2015, latest available data) has fallen since its peak of 10.8 in 2008 and is below the EU average ⁽³¹²⁾ of 10.2% in 2015. Throughout the last decade, public expenditure has decreased as % of GDP: from 7.1% in 2009 to 6.1% of GDP in 2015 (EU: 7.8% in 2015), although it has been relatively stable from 2013. Looking at health care without long-term care⁽³¹³⁾ reveals a smaller gap between public spending in Portugal and the EU average (5.9% vs 6.8% in 2015).

When expressed in per capita terms, also total spending on health at 1,942 PPS in Portugal in 2015 was far below the EU average of 3,305. So was public spending on health care: 1,297 PPS vs. an average of 2,609 PPS in 2015.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 2.4 pps of GDP, above the average growth expected for the EU of 0.9 pps of GDP, according to the "AWG

⁽³¹¹⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽³¹²⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽³¹³⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

reference scenario". When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 3.3 pps of GDP from now until 2070 (EU: 1.6) ⁽³¹⁴⁾.

Portugal faces low fiscal sustainability risks in the short run.

Risks appear, on the contrary, to be high in the medium term from a debt sustainability analysis perspective due to the still high stock of debt at the end of projections (2028).

In the long term, Portugal appears to face medium fiscal sustainability risks ⁽³¹⁵⁾.

Health status

In the last decades, the health status of the Portuguese population has improved considerably. This evolution seems to be correlated with increases in financial resources devoted to health care and to improvements in socio-economic conditions. Life expectancy (84.3 years for women and 78.1 for men in 2015) is just above the EU average (83.3 for women and 77.9 for men). However, healthy life years (55 years for women and 58.2 for men in 2015) are below the EU average (63.3 and 62.6 respectively). Infant mortality is below the EU average (2.9‰ vs. 3.6‰). The incidence of HIV/AIDS and tuberculosis has been defined as a public health priority.

System characteristics

Coverage

A National Health Service (NHS) provides 100% population coverage (to all the resident population and Portuguese citizens). The NHS is mainly funded by general taxation. There are also a number of complementary public and private health insurance schemes (called "health subsystems") covering certain professions. These include the banking sector private schemes and the three public subsystems for civil servants, police

⁽³¹⁴⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽³¹⁵⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

and military (ADSE, SAD and ADM). ADSE and SAD are funded on a voluntary basis by employees' contributions collected centrally, while ADM is also funded by state budget. These schemes cover about 14% of the population.

Administrative organisation and revenue collection mechanism

The budget for the health sector is defined annually in parliament when the general budget is approved. In recent years, authorities have tightened the monitoring over the budget execution. The information system has been strengthened and financial flows are regularly followed up on both an accrual and cash basis.

In 2015, 66.8% of total health expenditure funding came from government sources (direct and indirect taxes collected centrally). The remaining part is private expenditure on health including private voluntary health insurance and out-of-pocket payments. A large part of private expenditure is out-of-pocket which represents 27.7% of total expenditure on health (EU average of 15.9% in 2015), showing an increase since 2005 (23.3) but a decrease since 2010 (28.2). The rest comes from private insurance.

The Ministry of Health sets the national health policy strategy, defining public health and policy priorities, specifying the regulatory framework, defining the system organogram and providing the overall management of the health care system.

The "Administração Central do Sistema de Saúde" (ACSS) implements the decisions of the Ministry of Health under its supervision. It coordinates, monitors and controls NHS resource allocation and use, human resources policies and health facilities management. The ACSS is responsible for defining the budget allocation across regions and areas of provision (e.g. *contractos-programa* for hospitals), for defining hospital capacity and the service network (e.g. definition of health centres and hospital catchment areas and services provided by different hospitals) and for developing the contracting procedures within the sector. ACSS is also responsible for defining financial and activity targets and for monitoring the financial and activity flows in the system. Together with "Serviços Partilhados do Ministério da Saúde" (SPMS), it is responsible for developing

information systems that support monitoring, assessment and policy implementation in the system.

The "Serviços Partilhados do Ministério da Saúde" is the centralised purchasing agency for the Ministry of Health and tenders for and purchases centrally a variety of medical goods and services from medicines and medical devices to ICT services. The "National Agency for Pharmaceuticals" (Infarmed) is in charge of developing and implementing pricing and reimbursement policies, clinical and economic evaluation and monitoring prescription and dispensing practices together with SPMS.

There are also five regional health authorities which are responsible for implementing public health objectives and for purchasing primary, specialist and hospital care for their respective catchment population under the framework defined by the ACSS. Nevertheless, decision-making remains highly centralised (which may actually have helped with the implementation of cost-containment policies in recent times).

Role of private insurance and out of pocket co-payments

Co-payments (fixed fees) apply to primary care and specialist consultations, hospital care, home care and emergency care. Fees are lower for primary care than for specialist consultations and these are lower than emergency care to encourage a more cost-effective path of care. Cost-sharing also applies to pharmaceuticals (a share of the price) and public coverage of eye care and dental care is limited. There are exemptions based on income, for certain population groups (e.g. fireman) and certain medical conditions. As a result, more than 55% of the population is exempted from any cost-sharing in publicly provided/ publicly funded services and goods.

The take up of private voluntary health insurance has been growing over the years, mainly through employers as benefits package. 20.2% of the population takes up private voluntary health insurance, but it only accounts for 5.5% of health expenditure in 2015.

Coverage of services, types of providers, referral systems and patient choice

The NHS provides coverage for a wide range of health care services and goods. NHS supplies primary health care (including family medicine, pre-natal and post-natal follow up, prevention and promotion), outpatient specialist consultations and hospital care (day-case and inpatient) directly through a network of publicly owned facilities. The NHS also provides a wide range of related services including diagnostic services, physiotherapy and dialysis care either directly or through contracts with private providers.

Primary care functions as the central pillar of the system. NHS primary health care is provided through a network of group practices which include health centres, the more recent Family Health Units (Unidades de Saude Familiares - USFs) and mobile units to outreach the more rural/isolated parts of the country. There is a 24-hour primary care and paediatric counselling phone helpline. Primary care provision is mostly performed by the public sector.

Residents have to register with a family doctor (a general practitioner – GP). As about 7,7 of the population is not currently registered with a family doctor (October 2018 data), a national patient registry has been put in place to eliminate duplicate registration, identify vacancies in family doctors lists and allocate patients to family doctors. NHS family doctors refer patients for specialist care, operating as gatekeepers. In other words, a compulsory referral system is in place from primary care and the family doctor to the outpatient specialist. NHS outpatient consultations typically take place in hospital outpatient departments. There is an integrated nationwide electronic system to manage primary care referrals to specialty consultations across the country. This aims to ensure timely access to specialist consultations.

The NHS, through a network of general and specialised hospitals (including 3 oncological centres), provides most of the outpatient specialist care and hospital day-case and inpatient care. In order to improve access and reduce the waiting time for hospital surgery, authorities have in place an integrated central and nationwide electronic system to manage patients on waiting list. In

addition, they have introduced clinically defined maximum waiting times for visits to GPs, outpatient specialist consultations and hospital surgery. The NHS also contracts hospital services from several private and social entities. When 75% of the maximum waiting time for surgery has elapsed, the patient can choose a private provider to have access to care. This mechanism has allowed reducing waiting times for surgery by more than 50% since 2006. The vast majority of hospitals are public (85.7% of total acute care beds, with 6.6% owned by private not-for-profit hospitals and 7.7% owned by private for-profit hospitals).

Ambulatory diagnostic services, physiotherapy and dialysis care are often provided by the private sector (private for-profit and not-for-profit entities) contracted by the NHS to provide care for NHS users. The contracting rules have been harmonised with NHS conditions (e.g. fees have been aligned with NHS costs) in recent years. Since 2013, NHS developed the legal framework to implement tender processes to select providers through the lowest bid increasing providers' competition.

In addition, those who have enrolled in one of the public sub-systems have directly access to specialist or hospital care allowed by their scheme (which contracts only private specialists or hospitals) or provided by their own facilities. For these patients service coverage overlaps to a certain extent with that of the NHS, notably in terms of mainstream ambulatory specialties. The government also has a system of vouchers for dental care for certain population groups (pregnant women, elderly beneficiaries of the solidarity supplement and young people under 16 years) based on an indication of a family doctor and based on clinical criteria. The goal is to improve access to these services as NHS coverage is limited. For low income populations, there are also additional benefits, e.g. increased medicines reimbursement, prescription glasses.

Finally, specialist outpatient care can also take place in specialists' private individual or group practices and hospital care in private clinics and hospitals for private users at the cost of patient. Often, private provision, especially outpatient consultations, is conducted by the same specialists that work for the NHS although the public wage and working time is adjusted accordingly.

In mainland Portugal (public sector, august 2018) there are 29,481 practicing physicians (2.93 per 1,000 inhabitants) and they are disaggregated by specialists (19,304) and interns (10,177). The specialty of family medicine started in the early eighties and is recognised worldwide as it can be verified by The "World Health Report 2008" - primary health care ("Now More Than Ever") and "World Organisation of Family Doctors" reports. Within the total number for public sector, there are 5,598 family physicians (0.56 per 1,000 inhabitants, year 2018) working in family practices.

Portugal suffered from staff shortages and an unequal distribution of resources with a high concentration of physicians including GPs in big urban areas and a higher concentration in the region Centro. To address these, two medical degrees were created – with a focus on improving the skill mix towards primary care and needed specific specialties – and mobility rules have been changed slightly. Also, a small monetary bonus is given to doctors who moved to disadvantaged areas and further measures have been taken to encourage the mobility of doctors and other health workers. Acute hospital beds stand at 326 per 100,000 inhabitants in 2015 below the EU average of 4026 per 100,000 inhabitants, showing a reduction over the decade with the increase of one day surgery and long term care network.

Staff supply is regulated: there are quotas for medical students and by specialty and there is now some regulation regarding the opening of vacancies to improve staff distribution. In addition, the definition and adoption of the recently developed 3-year hospital strategic plans has implications for staff distribution and vacancies. Authorities are also developing a human resources planning instrument to help identify in which geographic areas or medical specialties there may be staff shortages developing and adjust training accordingly.

Purchasing and contracting of healthcare services and remuneration mechanisms

Remuneration is defined by the government. USFs primary care doctors receive capitation wages which are based on the characteristics of the population served and pay for performance. In addition, as USFs are part of an ongoing reform to

create more autonomous and multidisciplinary teams in primary care and incentives for better performance (e.g. better follow up of patients, notably chronic patients, better pre and post-natal care, more cost-effective use of medicines). In this context a small performance-related team bonus is paid to the practice on the basis of achieving pre-negotiated targets. Health centres' doctors receive a salary.

NHS specialists working in hospitals are paid a salary. Hospitals are paid on prospective global budgets based on DRGs, with the possibility to reallocate resources across cost-categories. In addition to the transfers from the government, hospitals generate their own revenue, through flat-rate user charges for outpatient and diagnostic services, special services (e.g. individual private rooms) and from privately insured patients.

Doctors in outpatient private practices are paid a fee for service and are paid a wage when providing hospital services.

Doctors' consultations per capita were below the EU average in 2012 (4.1 vs. 6.2). When looking at hospital activity, inpatient discharges per 100 inhabitants are lower than the EU average (respectively 7.8 vs. 16.5) while day-cases per 100,000 inhabitants are higher at 8,243 vs. 7,635 in 2015. The proportion of surgical procedures conducted as day cases (51.2%) is therefore much higher than the EU average of 32.3% in 2015. Hospital average length of stay for curative care is above the EU average (8.8 days vs. 7.6 days in 2015), though this may be a result of having a greater proportion of complex cases as inpatient.

Measures of input, process, output and outcome are used on a regular basis to compare the relative performance of hospitals (available at a website). This process has been extended to primary care providers since 2014.

There have been however increasing concerns about hospital arrears, which have continued to increase over the last few years and required several injections of money from the Ministry of Finance.

Although increasing demand and personnel expenses have been cited as factors, the recurrent accumulation of arrears in certain hospitals

highlights possible issues of under-budgeting, monitoring and budget-enforcement practices. The periodic injections of funds for clearing arrears alleviates the impact on suppliers, but so far does not appear to tackle the underlying hospital management issues which lead to in their accumulation.

The matter of arrears is a top priority for the Health and Finance Ministries. For that purpose the 'Estrutura de Missão para a Sustentabilidade do Programa Orçamental da Saúde' was created. This Structure was designed to follow up on the financial performance of the entities that are integrated in the national health budget program, and intends to identify and evaluate any budget imbalances as well as promote measures that favor stability and sustainability.

The market for pharmaceutical products, the use of Health Technology Assessment and cost-benefit analysis

The authorities have in place a large number of policies to control expenditure on pharmaceuticals. The initial price of all reimbursable medicines is based on clinical performance, economic evaluation, the cost of existing medicines and international prices (based on the minimum manufacturing price in ES, FR and Italy for 2018). Overall payback agreements and specific payback and price-volume agreements control expenditure directly. The authorities apply internal reference pricing, whereby the maximum reimbursement level of a product is based on the average of the 5 cheapest products of same active ingredient, form and dosage. There is a positive list of reimbursed products which is based on health technology assessment information.

In addition to compulsory e-prescription and INN prescription, authorities promote rational prescribing of physicians through compulsory treatment guidelines or practice protocols and prescription targets in primary care. Pharmacies have to dispense one of the five cheapest products of the same active ingredient. This is complemented with monitoring of prescribing and dispensing behaviour and education and information campaigns on the prescription and use of medicines. Direct advertisement of reimbursed pharmaceuticals is not allowed.

Portugal has made a very strong effort to promote the use of generics and there is an explicit policy target on generics equal to 60% for the NHS market. The price of generics must be 50% less than the branded product when it enters the market and subsequent price reductions apply. Generics application for pricing and reimbursement is evaluated faster than other medicines and legal and administrative rules have been simplified. These new regulations, in the medicines department, have led to an increase in the use of generics. The Infarmed (that regulates and controls pharmaceuticals) publishes an annual statistical report on sales growth of pharmaceuticals and the impact on the NHS and on patients direct cost.

E-health (e-prescription, e-medical records) and information and reporting mechanisms;

The authorities have introduced a number of e-health actions including the individual electronic NHS card, e-prescribing, e-appointments and electronic patient records. These e-actions help improving monitoring and control of prescription and consumption of services and goods and render the referral system and care coordination more effective, reducing the use of unnecessary pharmaceutical, specialist and hospital emergency care.

Health promotion and disease prevention policies

Despite the large health improvement since the 1970s, the authorities point to the need to improve health status further through promotion and prevention activities. Moreover, the authorities propose to continue the ongoing primary care reform to reinforce promotion and prevention for all including to those who are more vulnerable or at greater risk. The National Health Plan 2012-2016 defined strategies, priorities and targets to the development of health prevention policies.

Transparency and corruption

Since 2011, different measures have been implemented to address corruption and increase transparency. In terms of addressing corruption, the Ministry of Health developed a structured partnership with the judicial and police authorities, and created an anti-corruption intra-ministerial coordination group. With the aim of preventing

corruption, several legal frameworks have been improved, reinforcing competition and transparency (e.g. medical prescription, public contracting). The automation of invoice verification (e.g. medicines, ancillary exams, long term care) increased the ability to detect fraud and increased dramatically the number of criminal prosecutions. In parallel, since September 2011, financial, economic (P&L), activity, efficiency and quality data is publicised monthly for each NHS institution, contributing to the transparency of the all health system.

Recently legislated and/or planned policy reforms

As previously mentioned, the creation of the 'Estrutura de Missão para a Sustentabilidade do Programa Orçamental da Saúde' proposes that the Health and Finance Ministries are given tools that allow them to identify budget imbalances, and so promote approaches that favor the stability and sustainability of the hospitals. This includes measures that contribute to the reduction of payment deadlines towards suppliers of the health sector. In addition, the Structure has the objective of presenting medium term strategic options that will contribute to the sustainability of the NHS. For this, there will be the need to produce studies in the financial, investment and global resource management areas as well as in the organisation model.

Recent policy response

Fiscal consolidation to bring government revenues and spending into line had implications for the health sector through the adoption of a wide range of reforms in this area. Reforms aimed at further improving its efficiency and controlling spending in this area. Recent policies included:

- Review and increase overall NHS moderating mainly emergency services;
- Enacted legislation which automatically reduces the prices of medicines when their patent expires to 50 per cent of their previous price;
- Annual revision of prices of medicines and of countries of reference in order to achieve cost savings;
- Improvement of the monitoring system of prescription of medicines and diagnostic;
- Enacted compulsory prescriptions by INN for physicians at all levels of the system, both public and private, to increase the use of generics and biosimilar medicines and the less costly available products;
- Enacted legislation aimed at removing all effective entry barriers for generic and biosimilar medicines, in particular by reducing administrative/legal hurdles and timeframes for its health technology assessment in order to speed up the use and reimbursement of generics;
- Enacted prescription guidelines with reference to medicines and the realisation of complementary diagnostic exams on the basis of international prescription guidelines and integrated them in the electronic prescription system;
- Reinforcement of the centralised acquisition of vehicles, utilities, external services and other cross functional goods and services;
- Enacted measures to increase competition among private providers and reduction of fees;
- As part of the reorganisation of health services provision and notably the concentration and specialisation of hospital services and the further development of a cost-effective primary care service, reinforcement measures aimed at further reduce unnecessary visits to specialists and emergencies and to improve care coordination;
- On the basis of a comprehensive set of indicators, publication of regular trimestral reports comparing hospital performance (benchmarking);
- Ensured full interoperability of IT systems in hospital, in order to gather real time

- information on hospital activities and to produce monthly reports;
- Set-up of a system of patient electronic medical records and ensure access to all relevant health care facilities;
- Reorganisation and rationalisation of the hospital network through specialisation, concentration and downsizing of hospital services, joint management and joint operation of hospitals;
- Updated the legal framework applying to the organisation of working time of healthcare staff;
- Reduction of patient transportation costs.
- Increased freedom of choice of providers in the NHS to ensure competition and more access to care provision;
- Implementation of health education, literacy and self-care program.

Possible future policy changes

Some possible future policy changes include:

- Integrating primary care, hospital services and continuous care;
- Increasing access at the primary care level by enabling the possibility to contract services with private primary care units;
- Taking measures to organise and prepare the health sector to face an ageing population;
- Increase price competition for generics and biosimilar;
- Dissemination information to health professionals about new medicines (innovation, biosimilar, generics) and other relevant aspects;
- Create incentives to hospitals for the use of generics and some specific biosimilar;
- Give benchmark information and monitor the consumption of medicines and its expenditure in hospitals;
- Improve health technology assessment and economic evaluation of specific groups of medical devices;
- Implement a system for monitoring hospital consumption of medical devices.

Policy changes under preparation/adoption

There are several policies under preparation/adoption:

- Strengthening the model of integrated care, in permanent coordination between the Ministry of Health and the Ministry of Labour, Solidarity and Social Security, to consolidate the co-responsibility between both sectors, which guaranteeing access to care that meet the health and social needs of patients' chronic conditions and of people in situation of dependence;
- Implementation of the figure of the family nurse (in line with family doctor);
- Implementation of an integrated management program for chronic disease;
- Develop a forecast mapping for human resources;
- Implementation of measures for territorial distribution of services to ensure equity in access and rationality in care provision;
- Development of services according to the European Network of Reference Centres;

Challenges

The analysis above shows that a wide range of reforms have been implemented over the years, to a large extent successfully (e.g. the policies to control pharmaceutical expenditure or to strengthen primary care or to reduce hospital use or to improve data collection and monitoring), and which Portugal should continue to pursue and

consolidate. The main challenges for the Portuguese health care system are as follows:

- To continue to enhance primary care provision by increasing the numbers and spatial distribution of GPs and nurses and increasing opening hours in health centres. This could improve access to care while reducing unnecessary use of hospital care and therefore overall costs. This can be helped through implementing the comprehensive e-agenda planned by the authorities.
- To investigate if there is room to include an element of activity related payment in outpatient care (e.g. through the use of mixed payment schemes) to induce a higher number of outpatient consultations.
- To increase hospital output per bed while reducing the use of unnecessary hospital care and to strengthen the management and the budget control of hospitals. In addition to consolidate/ finalise the measures pursued in recent years to reduce duplication and improve efficiency and quality in the hospital sector (e.g. concentration and specialisation of hospitals within regions), authorities could perhaps also consider including an element performance related payment in hospital budgeting procedures notably using information on output and outcomes. They could also consider increasing the supply of follow-up care for long-term care patients so as to reduce the unnecessary use of acute care settings for long-term care patients.
- To continue to improve decision-making coherence across levels of government and between the NHS central authority and its regional branches.
- To improve data collection in some crucial areas such as resources and care utilisation. Better monitoring of activity in the sector could be used for planning and budgeting purposes. This should include efforts to assess and publish evaluations of the quantity and quality of care provided by the various providers for example. To increase the use of health technology assessment in decision-making, including for assessing new equipment or pharmaceuticals and before buying new equipment.
- To further enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, obesity) in various settings (at work, in school). The authorities could also consider what other complimentary measures such as higher excise taxes on tobacco, alcohol, soft-drinks or tighter road safety measures could complement existing measures including the smoking ban recently introduced.

Table 2.22.1: Statistical Annex - Portugal

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	159	166	175	179	175	180	176	168	170	173	180	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	21.3	21.8	21.9	21.4	20.3	20.9	20.3	20.1	20.2	20.7	21.4	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	0.6	1.4	2.3	0.1	-3.1	1.9	-1.7	-3.6	-0.6	1.4	2.2	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	-1.7	1.9	2.4	2.5	1.8	-6.9	-8.2	-2.5	0.9	-1.8	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	10.4	10.0	10.0	10.2	10.8	10.8	10.2	9.7	9.6	9.5	9.1	10.2	10.1	10.1	10.2
Total current as % of GDP	9.4	9.1	9.1	9.4	9.9	9.8	9.5	9.4	9.1	9.0	9.0	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.9	0.9	0.9	0.9	0.9	1.0	0.7	0.4	0.5	0.5	0.2	0.9	0.6	0.2	0.3
Total per capita PPS	1,921	1,948	2,044	2,127	2,205	2,257	2,093	1,911	1,904	1,936	1,942	2,745	2,895	2,975	3,305
Public total as % of GDP	6.9	6.5	6.4	6.6	7.1	7.1	6.7	6.3	6.2	6.1	6.1	8.0	7.8	7.8	8.0
Public current as % of GDP	6.7	6.3	6.2	6.4	6.9	6.9	6.5	6.1	6.1	6.0	5.9	7.7	7.6	7.6	7.8
Public total per capita PPS	1,278	1,263	1,315	1,374	1,449	1,492	1,367	1,232	1,233	1,235	1,297	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.16	0.18	0.20	0.20	0.19	0.29	0.23	0.15	0.10	0.10	0.15	0.2	0.2	0.2	0.2
Public as % total expenditure on health	66.5	64.8	64.4	64.6	65.7	66.1	65.3	64.5	64.7	63.8	66.8	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	15.6	16.3	16.3	16.9	14.8	12.7	12.3	13.2	12.4	11.8	12.6	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	23.3	25.1	25.7	25.8	24.6	24.6	26.3	28.2	27.0	27.7	27.7	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	10.5	10.5	10.5	10.6	10.6	10.6	10.6	10.5	10.5	10.4	10.4	502.1	503.0	505.2	508.5
Life expectancy at birth for females	81.5	82.5	82.5	82.7	82.8	83.2	83.8	83.6	84.0	84.4	84.3	82.6	83.1	83.3	83.3
Life expectancy at birth for males	74.9	75.5	75.9	76.2	76.5	76.8	77.3	77.3	77.6	78.0	78.1	76.6	77.3	77.7	77.9
Healthy life years at birth females	57.1	57.9	57.9	57.6	56.4	56.7	58.6	62.6	62.2	55.4	55.0	62.0	62.1	61.5	63.3
Healthy life years at birth males	58.6	60.0	58.5	59.2	58.3	59.3	60.7	64.5	63.9	58.3	58.2	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	111	97	98	94	90	85	123	119	114	115	111	64	138	131	127
Infant mortality rate per 1 000 live births	3.5	3.3	3.4	3.3	3.6	2.5	3.1	3.4	2.9	2.9	2.9	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.1	2.0	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	3.2	3.2	3.2	3.4	3.7	3.9	3.8	3.6	3.6	3.6	3.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	2.1	2.0	2.0	2.0	2.0	1.9	1.8	1.6	1.4	1.4	1.4	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.0	1.8	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.4	1.3	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.2	2.1	2.1	2.2	2.5	2.5	2.4	2.2	2.3	2.2	2.2	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.2	1.1	1.1	1.1	1.2	1.2	1.0	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.22.2: Statistical Annex - continued – Portugal

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	22.3%	21.7%	20.2%	19.6%	18.1%	17.4%	17.3%	18.2%	18.4%	18.4%	17.6%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	4.2%	4.0%	5.1%	5.2%	6.2%	6.1%	6.4%	7.6%	7.9%	8.0%	8.5%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	33.8%	34.6%	34.8%	35.8%	37.7%	39.2%	39.5%	38.9%	39.4%	39.5%	39.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	22.1%	22.3%	22.2%	21.2%	20.1%	19.2%	18.4%	16.7%	15.6%	15.4%	15.5%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	3.6%	3.7%	3.7%	3.9%	3.8%	3.9%	4.0%	4.1%	4.1%	4.1%	4.1%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.3%	2.1%	2.1%	2.2%	2.1%	2.1%	2.1%	2.0%	1.8%	1.8%	1.8%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.6%	1.8%	1.8%	1.8%	1.6%	1.9%	2.0%	2.0%	2.0%	2.0%	1.9%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	29.0%	28.6%	26.8%	25.6%	23.3%	22.5%	22.6%	23.7%	23.8%	24.0%	22.6%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	5.7%	5.5%	7.1%	7.3%	8.4%	8.3%	9.0%	10.9%	11.3%	11.6%	12.3%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	32.7%	32.9%	33.7%	34.1%	35.9%	36.9%	37.7%	36.4%	37.2%	37.1%	37.0%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	17.6%	17.7%	17.7%	17.5%	17.2%	17.4%	15.0%	13.5%	12.8%	12.8%	12.8%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.5%	1.7%	1.6%	1.7%	1.7%	1.8%	1.9%	1.8%	1.6%	1.7%	1.7%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	1.9%	1.6%	1.6%	1.7%	1.6%	1.5%	1.6%	1.3%	1.2%	1.2%	1.0%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	1.5%	1.6%	1.6%	1.6%	1.4%	1.6%	1.7%	1.6%	1.6%	1.3%	1.3%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	:	0.58	0.89	0.92	:	:	:	:	:	:	:	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	0.5	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	2.6	2.6	2.6	2.7	:	:	:	:	:	:	:	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	0.1	:	:	:	:	:	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	15.4	:	:	:	:	:	:	:	16.1	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	18.6	:	:	:	:	:	:	:	16.8	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	13.3	13.1	12.6	12.4	12.0	12.3	11.9	12.0	10.0	9.9	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	273	279	279	282	288	295	304	321	337	350	365	324	330	338	344
Practising nurses per 100 000 inhabitants	456	481	509	534	560	587	634	580	610	:	:	837	835	825	833
General practitioners per 100 000 inhabitants	46	47	47	48	49	50	51	54	57	59	62	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	3.9	3.9	4.1	4.5	4.0	4.1	4.2	4.1	:	:	:	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	8	8	8	8	8	8	8	8	8	8	8	17	16	16	16
Day cases discharges per 100 000 inhabitants	1,012	1,450	7,520	8,451	9,327	9,692	9,905	10,152	7,530	7,918	8,243	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	74.0	75.0	62.9	63.0	63.6	64.3	63.6	66.2	64.2	64.8	64.0	77.1	76.4	76.5	76.8
Hospital average length of stay	7.0	7.1	8.5	8.4	8.6	8.7	8.7	9.0	8.9	8.9	8.8	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	9.5	:	:	:	53.7	54.9	55.7	56.2	48.7	50.3	51.2	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.9	6.2	6.5	6.9	7.2	7.5	7.8	8.0	8.2	8.3	8.3	8.3	Portugal	EU	
AWG risk scenario	5.9	6.3	6.7	7.2	7.7	8.1	8.5	8.8	9.0	9.2	9.3	9.2	2.4	0.9	
													3.3	1.6	
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	10.3	10.2	10.0	9.9	9.7	9.6	9.4	9.1	8.8	8.6	8.3	8.0	Portugal	EU	
													-22.6	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

Note: *Excluding expenditure on medical long-term care component.

2.23. ROMANIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

In 2015, GDP per capita in Romania with 13,900 PPS was one of the lowest in the EU (29,600 PPS). Romania's economy has grown significantly since accession to the European Union, but the country is still facing important development challenges. In light of a continuously difficult economic and fiscal situation, Romania was under three precautionary Balance-of-Payments assistance programmes provided by the European Union and the International Monetary Fund. Health care reforms were part of the conditionality agreed under the programmes. Current population is estimated at 19.9 million. Romania's population is characterised by a declining growth with an ageing population and a rising share of older age cohorts. The population is projected to decrease to 15.0 million until 2070.

Total and public expenditure on health as % of GDP

Romania has historically committed a relatively low share of its GDP to health care. Total expenditure on health was at 5.3% of GDP in 2015, i.e. nearly half the EU expenditure level (EU: 10.2% in 2015). Total public spending on health was at 4.2% of GDP (EU: 8.0%). Looking at health care without long-term care⁽³¹⁶⁾ reveals a similar picture with public spending below the EU average (3.9% vs. 6.8% in 2015). Spending relative to GDP has been relatively constant since 2005. In 2015, only 11.7% of total government expenditure was channelled towards health spending (EU: 15.0%). In per capita terms, total (889 PPS) and public spending (706 PPS) are well below the respective EU averages (3,305 PPS and 2,609 PPS)⁽³¹⁷⁾. However, per capita expenditure has tripled in the past ten years.

⁽³¹⁶⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽³¹⁷⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to Eurostat data series, which reflect current expenditure only.

Expenditure projections and fiscal sustainability

Public expenditure on health care is projected to increase by 0.9 pps of GDP ("AWG reference scenario"), at the average increase of 0.9 pps for the EU. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 2.1 pps of GDP from now until 2070 compared to the EU average of 1.6 pps. Overall, projected health care expenditure poses a risk to the medium and long-term sustainability of public finances⁽³¹⁸⁾. Medium fiscal sustainability risks appear for Romania over the long run. These risks derive primarily from the unfavourable initial budgetary position, compounded by age-related public spending⁽³¹⁹⁾.

Health status

Health outcomes in Romania are lagging behind EU standards. Life expectancy at birth is 71.5 years for men and 78.7 years for women, far below the EU averages (EU: 77.9 for men and 83.3 for women). Also healthy life years are below the EU averages for women (59.4 vs. 63.3 years), and for men (59 vs. 62.6 years). Amenable mortality rates, i.e. deaths that should not occur with timely and effective care, are well above EU average (318 deaths in Romania versus 127 deaths in the EU per 100,000 inhabitants). Infant mortality is at a high level of 7.6‰ in 2015 (EU: 3.6‰), although it has fallen consistently since 2005 (15‰).

System characteristics

Administrative organisation, system financing, revenue collection mechanism

Law 95/2006 on Health Care Reform is the basic health care law in Romania, defining the role of social health insurance, private health insurance, hospitals organisation, community care, primary health care, pharmaceuticals, emergency services, public health, and national health programmes. The system is organised on two main levels:

⁽³¹⁸⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽³¹⁹⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

national/central and district. The national level is responsible for defining general objectives and ensuring the fundamental principles of government health policy; the main central institutions in charge are the Ministry of Public Health (MPH) and the National Health Insurance House (NHIH). The ministry defines the health policies, while NHIH autonomously administrates the social health insurance system. The NHIH is the main financial source of the system receiving contributions collected by National Agency for Fiscal Administration (NAFA). Through an annual framework contract, the health care services are contracted between the NHIH and providers as well as the MPH.

Financing is based on income related health insurance contributions. The rate is 10.7% of payroll, of which the employer pays 5.2% and the employee 5.5%. The self-employed categories pay 5.5% of their earnings. Theoretical coverage is 100% of the population. Many groups including children, dependants, disabled, unemployed, military personnel and war veterans, and those on sickness or maternity leave have free access to health insurance. Due to these exceptions there are around 5 million contributors and 20 million beneficiaries. Overall, the revenue base is very narrow.

A total of 42 District Health Insurance Funds (DHIFs) purchase and reimburse care for their respective population by establishing contracts with care providers, while the NHIH, which regulates and administers the mandatory health insurance, establishes contracts with the College of Physicians, defining remuneration systems. The State budget (through taxation revenues) covers public health services funding (health promotion and disease prevention activities) and capital investment. The basic benefits package is defined yearly in agreement between the NHIH and the Ministry of Health, and approved by the Government.

Since 2009, with the support of the European Commission (EC), the World Bank, and the International Monetary Fund (IMF), the Government of Romania has been working on a structural reform of its health care system. The reform programme seeks to put emphasis on primary and secondary prevention, reduce unnecessary inpatient admission services, and

develop sustainable access to higher-quality secondary ambulatory services. Recently, a new basic benefits package was approved for this purpose. A hospital rationalisation plan was developed and some small hospitals were closed. A simple Health Technology Assessment (HTA) tool has been implemented for evidence-based access to essential technologies, and some medicines without proof of health benefits were excluded from the list of compensated drugs, resulting in budgetary savings. The basic package should be fully functional in two to three years, and during this period it is necessary to perform continuous monitoring, timely evaluation, and economic/budget impact analysis in order to adjust the package to the population health needs, in accordance to health system performance targets.

The pace of health sector reform implementation has been slow due to the lack of resources to finance some critical steps necessary to support the new policies, as well as lack of administrative capacity. It is a challenge to consolidate the current hospital structure if an alternative modern ambulatory service is not fully functional before closing down and eliminating unnecessary beds. Merging fragmented services from multi-building hospitals cannot be easily completed without the rehabilitation of an appropriate building to host the new comprehensive and articulated hospital.

Coverage and role of private insurance and out of pocket co-payments

Social health insurance is compulsory for all citizens and for foreigners residing in the country.

The share of private total health expenditure (20.6% in 2015) is at the EU average of 21.6%, as a result of a large reduction in out-of-pocket expenditure (21.3% of total health expenditure in 2011 vs. 34% in 2001) and the efforts by national authorities to improve access to care for certain groups of the population. However, there remains about 23% of the population that is not correctly insured and cannot access services because they do not pay contributions, lack the appropriate official papers and residency requirements or have not registered with a family doctor/GP. There are plans to give the uninsured access to certain preventive health programmes on top of emergency care.

Access to healthcare remains a major concern. Despite a mandatory health insurance system, only 77 % of the population was insured in 2016. Compared with an EU average of 2.5 %, 6.5 % of the Romanians report having had unmet healthcare needs due to cost, distance or waiting times in 2016. Widespread informal payments add to the costs and are among the main reasons for poor access to healthcare, especially for patients with low income. Access to healthcare is further hindered by the unavailability of health professionals. The number of physicians and nurses per inhabitant is very low compared with the EU average, mainly due to the emigration of qualified physicians to other EU countries, poor working conditions and low salaries. Despite this situation, there is no formal strategy on healthcare human resources in place.

Current cost-sharing rules do not necessarily encourage a greater use of primary care services vis-à-vis specialist and inpatient care, or a greater use of more cost-effective services, although they encourage the use of generics. In April 2013, co-payments for certain medical services were introduced. Contributions are between RON 5 and 10 per patient. Emergency care, family doctors and medical laboratories do not charge a co-payment. Children up to 18 years, youth aged 18-26 without income, pregnant women, war veterans, persons with chronic diseases, and pensioners receiving a pension benefits inferior to RON 740 per month are exempted from these co-payments.

There are reports of significant informal (non-official) payments. While they may increase the income of physicians, informal payments do not bring additional revenues to the insurance funds, do not encourage a more effective use of services and constitute an additional barrier to access as there are no exemptions for low income or high risk groups. Some studies estimate that they increase out-of-pocket expenditure to more than 30%. Hence, it would be worth investigating if the current cost-sharing could be adjusted to encourage greater use of more effective and cost-effective services: e.g. more use of primary care than specialist care, more health promotion and disease prevention activities (e.g. vaccination), more cost-effective pharmaceuticals, while tackling informal payments.

Private insurance companies can offer supplementary and/or complementary health insurance. Packages cover the services not included in the basic benefit package, higher-comfort hospital accommodation and co-payments charged by providers for the services included in the basic benefit package. Eligibility for private co-insurance is conditioned on paying the mandatory contribution for the basic package of services.

Types of providers, referral systems and patient choice

Public and private provision coexists. Primary care is provided by independent general practitioners and nurses operating in private practices. Ambulatory specialist care is provided in specialised centres and hospital outpatient departments. Inpatient hospital care is provided in hospitals, mostly publicly owned, and is increasingly under the responsibility of local authorities. All these providers establish contracts with the NHIF.

The total number of practising physicians per 100,000 inhabitants (277 in 2015) is well below the EU average (344 in 2015), but has been rising continuously throughout the last decade. This may explain the difficulties in availability and distribution of physicians across the country. Data on the physician skill-mix indicates that the number of GPs per 100,000 inhabitants (62 in 2015) is below the EU average (EU: 78). Moreover, GPs seem to have a limited medical role in health care delivery. The number of nurses (641 in 2015) per 100,000 inhabitants is below the EU average of 833. Romania has suffered heavily from staff migration to other EU countries, where qualified health staff is needed and wage levels are higher.

National authorities have made limited efforts to enhance primary care financing and provision and strengthen the referral system from primary care to specialist doctors as well as the gatekeeping role of GPs (to reduce the unnecessary use of specialist and hospital care). All inhabitants have to register with a GP, who acts like a family doctor and as a gatekeeper referring patients to specialist and hospital care. However, despite it being mandatory, many have not yet registered with a GP and the referral system is often bypassed by

some groups of the population. In addition, urgent /after-hours access to primary care services is very limited resulting in an unnecessary use of hospital emergency wards. Patients can choose their GP and choose the specialist and hospital after referral. This referral and coordination role is to be further enhanced through the use of ICT systems and the implementation of electronic patient records, as started in 2015, and electronic monitoring of prescriptions, which can help control expenditure. In 2014, the budget for primary care physicians was increased to roughly 8% of expenditure by the NHIH. However, compared to the EU, the budget for primary care lags significantly behind.

Romania has seen an increase in the number of acute care beds per 100,000 inhabitants in the last decade (456 in 2003 vs. 503 in 2015) and its number is higher than the EU average (EU: 402). Many hospital beds in Romania are however not necessarily used for acute care but for other purposes such as long-term hospitalisation of patients with chronic diseases. Further reductions in hospital capacity is an area where further improvements can still be made, but the total number of beds and its use will, in the medium and long-run strongly depend on the changes in the provision of long-term care services implemented in Romania (which can reduce bed blocking in acute care settings) as well as changes in surgical practices.

Public expenditure on inpatient care as a share of GDP is below the EU average (1.2% vs. 2.5% in the EU). However, inpatient care accounts for roughly 32% of public expenditure on health in Romania, which is at the EU average. The number of hospital inpatient discharges was at a very high level, with 21 discharges per 100 inhabitants, in 2015 (EU: 16 in 2015).

Total and public expenditure on outpatient care as a share of GDP were below the EU average (0.6% and 0.4% vs. 2.4% and 1.8% in the EU). Total and public expenditure on outpatient care as a share of current health expenditure were also below the EU average (12% and 10% vs. 24% and 23% in the EU in 2015). Low expenditure may be a sign of a health system which is oriented away from ambulatory and towards hospital care, providing potential to increase the relatively cost-effectiveness of care, by shifting away from hospital-centric health care provision.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Payment systems have evolved over the years involving a mixture of remuneration schemes. GPs receive a mix of capitation and fees for defined activities (health promotion, disease prevention and disease management activities). This mixed system intends to render primary care more attractive and provide incentives for primary care provision, including some health promotion, disease prevention activities and disease management. Ambulatory specialists are remunerated on a fee-for-service basis while hospital staff is paid on a salary basis. Acute care hospitals remuneration is based on prospective activity-based payment using DRGs and fee-for-services or flat rate per case. Although significantly improved and based on complex criteria, the basis for establishing contracts between the NHIH and the various providers could be further improved to favour cost-effective interventions in the long-run.

The introduction of a new benefits package would require a revision in health provider payment mechanisms. The hospital payment system is based on production of services (a Diagnosis Related Group (DRG) system, which was piloted in 2003 and implemented in 2005), but the system needs to be transformed to better estimate the costs and eliminate perverse incentives. For example, some mild cases that could be treated in ambulatory services are being admitted because the DRG system overestimates the cost of treating those cases. On the other hand, some more complex cases are being referred because the DRG value is below the real cost. In parallel, in primary care, NHIF allocates 6% of the total insurance fund, while introducing a cap in the annual contract, that eliminates the incentives to increase primary health care services.

The market for pharmaceutical products

Total spending on outpatient pharmaceuticals has reached a respectable level 1.9% of GDP in 2015, rising by from 1.6% of GDP in 2005. Overall, spending in the pharmaceutical sector grew faster than spending in the health sector. As a consequence, the share of outpatient pharmaceuticals within total health expenditure has reached a high 38% in 2015 (from 28% in

2005). This is one of the highest shares in the EU. Much of the growth in expenditure has been borne by the private sector financing of outpatient pharmaceuticals.

In order to control the spending bill for the public payer, pharmaceutical spending is limited by a defined threshold, and overspending is recuperated from the manufacturers (payback, claw-back system). The system has been criticised, because of the high overspending that has to be financed by manufacturers, but has proved to provide an effective budget ceiling. The pharmaceutical budget is still structurally overspent increasing future fiscal risks. While overspending is recovered via the claw-back tax and is thus budget neutral, it has led to withdrawals of cheap generic medicines from the market. The planned revisions of the claw-back tax and of the public reimbursement for distributors of pharmaceutical products to incentivise the provision of low cost medicines to patients are yet to be implemented.

Recommendations regarding the listing of medicines on the national formulary are the responsibility of the National Transparency Committee (NTC). However the NTC processes appear to be opaque and ad hoc. Recently, an interim Health Technology Assessment (HTA) process was elaborated for the approval of new drugs, and since 2015, the Ministry of Health applies a rapid systematic HTA process to delist and enlist molecules from the list of reimbursable medicines.

With respect to pricing, there is extensive reliance on the use of external reference pricing for medicines manufactured outside Romania (with cost-plus pricing for those manufactured domestically). External reference pricing is based on the lowest price from within a basket of 12 EU countries according to an algorithm published by the Ministry of Public Health. However, prices have not been updated in the past years.

Prescription medicines are subsidised in accordance with four reimbursement lists:

- List A: includes most commonly used medicines (largely generics), reimbursed at 90% (10% co-insurance)

- List B: includes mostly originator medicines; reimbursed at 50% (50% co-insurance)
- List C: comprises medicines for chronic diseases included in the National Health Programs and/or for specific population groups (pregnant women, children, teenagers, etc.). List C medicines are fully reimbursed for eligible beneficiaries.
- List D: medicines without proven effectiveness, reimbursed at 20%.

Use of Health Technology Assessments and cost-benefit analysis

An interim Health Technology Assessment (HTA) tool to implement evidence-based access to essential technologies has been implemented in 2015, and reimbursement rates of some medicines without proof of health benefits were reduced to 20% from the list of compensated drugs, resulting in significant savings.

Corruption

Corruption is present in many economic sectors and involves appointed and elected officials at all levels of government as well as civil servants and employees of public institutions. This is borne out by the record of criminal investigations and convictions for corruption ⁽³²⁰⁾. Preventing corruption in public administration was one of the key priorities of the 2012-2015 national anti-corruption strategy. The evaluation of the strategy shows some progress in putting in place corruption prevention measures at the level of national administration. It concludes, however, that local administration structures are severely lagging behind in terms of building up the necessary capacity to prevent corruption effectively. The government included additional measures in the renewed anticorruption strategy 2016-2020 to remedy the weaknesses identified in the evaluation.

Corruption remains a challenge in the health sector, despite some recent action to combat the problem. Oversight of public procurement contracts in the health sector is insufficient (see section 3.1). The centralised procurement unit in

⁽³²⁰⁾ COM (2016) 41 final; SWD (2016) 16 final.

the Ministry of Health is heavily understaffed and its mandate covers only 25 % of hospitals. The lack of transparency in medical reimbursements constitutes a severe challenge in putting in place measures to prevent fraud and corruption over reimbursement claims. This has a direct impact on the health budget. Although services provided in private health units are partially covered by public funds under the single national health insurance scheme, they are not included in the monitoring exercise for the use of public funds. While healthcare was one of the key sectors addressed by the 2012-2015 national anti-corruption strategy, the sectorial strategy did not produce tangible results. The challenge facing the renewed sectorial strategy is to integrate the findings of existing policy assessments into a comprehensive approach that extends to all relevant players and processes.

Recently legislated and/or planned policy reforms

Romania has embarked on a set of reforms in recent years. A National Health Strategy 2014-2020 was approved by the end of 2014. The strategy covers the following areas: public health and health care (with a focus on improving the health of women and children, reduce morbidity and mortality of non-communicable diseases ensuring equitable access – especially for vulnerable groups – to healthcare quality and efficient in terms of cost, health research, eHealth technologies and health infrastructure (national, regional and local).

Several pilot projects were implemented, such as to improve access to health care for vulnerable persons, programmes for prevention and curative health of women and children, to increase access to health care of persons living in remote and isolated communities.

In addition, in 2014 a new package of basic health services was approved, introducing chronic disease management provided by family doctors. At the primary health care level, preventive consultations were introduced for people over the age of 18 to check for certain major diseases and conditions.

Starting from July 2017, a total of 465,230 retired people with monthly income of less than Lei 700 (€150) and, retirees with income from pensions, social allowances and earned monthly income of

less than Lei 900 (€193) (whether or not they have other earnings) benefit from medicines in outpatient care with 90% compensation from the reference price (corresponding to the common international nomenclature from the sub-list B).

In addition, the implementation of several health programmes has continued in order to increase the access of vulnerable people to health services, such as vaccination, prevention, supervision and control of HIV/AIDS infection or tuberculosis, surveillance and limitation of microbial resistance and healthcare-associated infections, monitoring use of antibiotics, transplantation of organs, tissues and cells of human origin, women and children health, etc.

Also day hospitalisations were regulated and their financing improved to reduce excessive use and duration of hospitalisations. The basic package aimed to decrease admissions to hospitals, increase the number of cases resolved in day-care facilities and to establish the conditions for the development of primary health care and ambulatory services. Under the package, certain diagnoses (104 medical conditions), surgical procedures (96) and medical services (36) will be dealt with in day-care facilities. Admission to hospital is allowed, however, in cases of medical need.

In order to generate savings, a centralised procurement system was developed and the capacity of centralised procurement unit enhanced, focusing on the procurement of medicines, vaccines and of other medical supplies. In 2014, there were 15 centralised procurements for drugs, vaccines and other medical supplies, with savings of more than RON 47 million.

As regards to modernisation of the IT infrastructure, following the introduction of electronic prescriptions in 2012 a system of eHealth cards was implemented in 2015. Cards serve as a mandatory tool for reimbursement for most medical services delivered by registered providers. NHIH distributed more than 15 million health insurance cards, and health insurance card usage commenced in February 2014 and became mandatory on 1 May 2015. In 2014, NHIH also implemented the electronic patient file system, replacing the prior hard-copy patient file system. The electronic file system is currently functional and accessible. The National Health Insurance

House (CNAS) obtained European funding (of about €1 million) for an "Open Source Healthcare Insurance Gateway for Electronic Exchange of Social Security Information" IT project to set up an electronic exchange of information with counterpart institutions from other EU countries.

The IT platform *Monitorizarecheltuieli* ⁽³²¹⁾ has been used to increase transparency in public procurement and hospital management. In 2017, data regarding 3,310 award procedures defined by the Law No 98/2016 on public procurement and 4,014 direct purchase procedures were published on this IT platform. Furthermore, the financial reports of 378 public hospitals were published in 2017.

In order to reduce the excessive use of hospitalisation, the funds allocated for outpatient care and primary health care were increased to encourage treating patients in ambulatory specialist and the family physician. Additional funds have been allocated for primary care from RON 1424.9 million in 2014 (6.7%) to RON 1513.7 million in 2015 (7% from total health expenditure of NHIH). In the period 2016-2018 the aim is to continue with an annual increase of 5% (compared to the allocation for 2015) of funds for primary health care. In 2016 the budget for primary care amounted to RON 1515.5 million (including permanent centres), approximately at the level of 2015, and it represented 7% of total health care expenditure of NHIH, excluding amounts for cost-volume contracts and cost for salary increases related to personnel paid from public funds provided by GEO 35/2015. In order to stop the brain drain in the outpatient health sector, salaries paid by public funds have significantly increased in 2018 with Law 153/2017.

In 2018, funds allocated to primary health care have increased with approximately 17% compared to 2017. The outpatient services were extended by introducing a basic package of medical services that can be provided in outpatient clinics. Furthermore, the day hospitalisation services package has been expanded to cover for diseases that have been previously provided by continuous care within hospitals.

To reduce informal payments, the project Good Governance in the Health System aimed to develop a coherent policy to prevent and combat corruption in health, some components of which are covered in the National Action Plan to increase the quality of care and reduce vulnerabilities, the regulation regarding ethics council in public hospitals, regulating the organisation of a system for monitoring and control of notifications and complaints regarding patients' rights and their abuse to healthcare professionals, was approved.

In line with strategic directions of the health strategy, an analysis on the resources needed to modernise the healthcare infrastructure was developed and set out in a project funded with a loan by the World Bank that started in 2015. The main objectives of the project on health sector reform for improving the quality and efficiency of the health system are:

- rationalising the hospital network by providing goods, services other than consulting, advisory services and training in emergency regional hospitals, district hospitals and regional hospitals selected;
- strengthening secondary care outpatient specialist by providing goods, works, services other than consulting, consultancy and training;
- improving the capacity of the Ministry of Health and other relevant government institutions for governance and management of the sector, to reduce the gap between policy and practice and to reinforce the capacity and improve quality of care by providing goods, works, services other than advisory, consultancy and training; and
- supporting the Ministry of Health and the Project Management Unit (PMU) in the management and implementation of the project, including fiduciary duties, monitoring, evaluation and reporting by providing goods, works, services other than consulting, consulting services, training, audit and operational costs.

⁽³²¹⁾The IT platform *Monitorizarecheltuieli* can be accessed under www.monitorizarecheltuieli.ms.ro.

Challenges

The analysis above shows that a number of reforms have been implemented over the years aiming to improve the efficiency of care delivery and which Romania should continue to pursue. Reforms have met with a number of obstacles and there is still room for improvement in core areas of care. The main challenges for the Romanian health system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades, which can pose a risk to the long-term sustainability of public finances.
- To improve the basis for more sustainable and larger financing of health care in the future to improve access as well as quality of care and its distribution between population groups and regional areas.
- To increase equity in financing of care and tackle informal payments.
- To define a comprehensive human resources strategy to ensure a balanced skill-mix, avoid staff shortages and motivate and retain staff to the sector.
- To continue to enhance and better distribute primary health care services and basic specialist services to improve equity of access and the effectiveness and efficiency of health care delivery; to ensure an effective referral systems from primary to specialist and hospital care and improving care coordination between types of care, notably by ensuring that users register with their GP and through the development of electronic patient records in the future.
- To continue the efforts to decrease over and unnecessary use of hospital inpatients care by decreasing the number of hospital beds, through hospital restructuring and rationalisation: to increase day case surgery, to improve the provision of after-hours primary care services, and to reduce the number of uninsured who tend to use emergency services rather than primary care services (which are not covered to large extent).
- To make more use of cost-effectiveness information, as planned, in determining the basket of goods and the extent of cost-sharing and define the latter to induce cost-effective behaviour. To explore if current cost-sharing could be adjusted to encourage greater use of more effective and cost-effective services: e.g. more use of primary care than specialist care, more health promotion and disease prevention activities (e.g. vaccination), more cost-effective pharmaceuticals.
- To reduce the causes of structural overspending of the pharmaceutical budget, increasing the cost-effectiveness of prescribed and used medicines, which could make more room for financing of new cost-effective innovations.
- To tackle corruption in the health system.
- To continue to improve accountability and governance of the system and identify possible cost-savings in the health sector administration, as it currently involves many national and district institutions. To ensure that resource allocation between regions is not detrimental to poorer regions.
- To continue to improve data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted and use to continuously improve access, quality and sustainability of care.
- To clearly establish public health priorities and enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (smoking, alcohol) and the pattern of both infectious and non-infectious diseases.

Table 2.23.1: Statistical Annex – Romania

General context												EU- latest national data			
GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP, in billion Euro, current prices	80	98	125	142	120	127	133	134	144	150	160	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	13.2	14.0	14.2	14.2	13.0	13.0	13.1	13.2	13.0	13.3	13.9	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	4.8	8.7	8.5	10.1	-5.1	-2.2	2.5	1.7	3.9	3.5	4.5	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	0.6	11.7	14.3	-1.3	2.8	-3.5	1.0	4.6	2.9	-1.4	3.7	0.2	0.2	4.1
Expenditure on health*	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Total as % of GDP	5.5	5.1	5.2	5.4	5.7	6.0	5.6	5.6	5.6	5.6	5.3	10.2	10.1	10.1	10.2
Total current as % of GDP	5.5	5.1	5.2	5.3	5.6	5.8	5.5	5.5	5.2	5.0	5.0	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	433	494	652	787	699	779	775	774	846	880	889	2,745	2,895	2,975	3,305
Public total as % of GDP	4.5	4.2	4.5	4.5	4.6	4.9	4.6	4.6	4.3	4.2	4.2	8.0	7.8	7.8	8.0
Public current as % of GDP	4.4	4.0	4.2	4.3	4.4	4.7	4.3	4.4	4.1	4.0	3.9	7.7	7.6	7.6	7.8
Public total per capita PPS	353	404	559	657	569	636	636	640	647	658	706	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.08	0.15	0.30	0.25	0.21	0.21	0.26	0.24	0.17	0.18	0.31	0.2	0.2	0.2	0.2
Public as % total expenditure on health	81.6	81.7	85.8	83.5	81.5	81.7	82.1	82.7	76.5	74.8	79.4	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	9.9	13.4	11.2	9.1	10.6	10.9	9.8	11.7	11.8	11.5	11.7	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	:	100.0	100.0	:	86.0	86.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	18.5	20.0	17.6	18.2	20.8	19.6	20.7	19.5	20.2	20.3	21.3	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	21.4	21.3	21.1	20.6	20.4	20.3	20.2	20.1	20.0	19.9	19.9	502.1	503.0	505.2	508.5
Life expectancy at birth for females	75.4	76.1	76.8	77.5	77.7	77.7	78.2	78.1	78.7	78.7	78.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	68.4	69.0	69.5	69.7	69.8	70.0	70.8	70.9	71.6	71.4	71.5	76.6	77.3	77.7	77.9
Healthy life years at birth females	:	:	62.5	62.9	61.7	57.5	57.0	57.7	57.9	59.0	59.4	62.0	62.1	61.5	63.3
Healthy life years at birth males	:	:	60.5	60.0	59.8	57.3	57.4	57.6	58.6	59.0	59.0	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	225	216	198	185	182	179	344	339	325	319	318	64	138	131	127
Infant mortality rate per 1 000 live births	15.0	13.9	12.0	11.0	10.1	9.8	9.4	9.0	8.9	8.4	7.6	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	2.0	1.9	1.8	1.9	2.1	2.4	1.9	1.3	1.5	1.4	1.3	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.5	0.4	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.6	1.4	1.4	1.4	1.4	1.4	1.7	1.6	2.1	1.9	1.9	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.0	0.1	0.1	0.3	0.3	0.4	0.4
Prevention and public health services	0.4	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.1	0.1	0.1	0.3	0.2	0.3	0.3
Health administration and health insurance	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	2.0	1.8	1.8	1.9	2.0	2.3	1.9	2.0	1.4	1.4	1.2	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	0.3	0.3	0.3	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.7	0.6	0.6	0.6	0.5	0.6	0.8	0.8	1.3	1.1	1.2	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Prevention and public health services	:	:	:	:	:	:	:	:	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.23.2: Statistical Annex - continued - Romania

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	36.9%	37.0%	35.3%	36.2%	37.6%	40.3%	34.2%	24.3%	28.0%	28.6%	25.5%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	4.8%	5.0%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	9.1%	8.3%	9.0%	10.9%	9.4%	9.1%	9.2%	10.0%	10.6%	11.5%	12.1%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	28.3%	27.9%	26.1%	25.5%	25.0%	24.7%	30.4%	29.4%	40.9%	37.4%	38.4%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.8%	1.0%	1.2%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	6.8%	5.3%	6.5%	5.8%	8.3%	6.2%	6.9%	6.8%	1.5%	1.8%	2.0%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	4.0%	6.3%	5.6%	1.7%	1.4%	1.9%	2.0%	1.6%	2.9%	3.0%	2.4%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	44.9%	45.4%	42.9%	44.1%	46.4%	49.7%	43.1%	44.7%	34.8%	35.7%	32.0%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	:	6.1%	6.3%	6.5%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	8.4%	7.7%	8.6%	10.3%	8.4%	7.3%	7.6%	8.0%	9.0%	10.1%	9.8%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	16.8%	14.5%	15.0%	14.2%	10.7%	12.5%	18.2%	18.1%	32.4%	28.1%	30.0%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	0.5%	0.5%	0.5%	0.2%	0.2%	0.2%	0.2%	0.2%	0.5%	0.8%	0.8%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	:	:	:	:	:	:	:	:	1.9%	2.3%	2.6%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	4.3%	8.0%	7.9%	3.5%	2.3%	2.6%	2.5%	2.1%	3.6%	3.8%	3.1%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	:	:	0.11	0.13	0.19	0.24	0.31	0.38	0.44	0.47	0.54	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	:	:	0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	7.9	:	:	:	:	:	9.1	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	:	:	20.5	:	:	:	:	:	19.8	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	7.7	8.5	10.6	11.9	10.4	9.0	9.1	9.6	9.6	:	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	217	216	212	221	226	237	239	261	264	270	277	324	330	338	344
Practising nurses per 100 000 inhabitants	548	563	566	555	569	526	534	580	601	616	641	837	835	825	833
General practitioners per 100 000 inhabitants	67	82	123	66	59	68	68	69	64	64	62	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	4.8	5.0	4.9	5.1	5.2	5.0	4.8	4.9	4.8	5.3	5.4	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	:	:	21	23	24	23	21	22	22	21	21	17	16	16	16
Day cases discharges per 100 000 inhabitants	:	:	:	:	4,333	5,205	5,569	6,819	8,399	9,895	13,022	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	:	:	7.7	7.7	7.5	7.4	7.5	7.5	7.4	7.5	7.5	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	:	:	:	15.0	18.3	20.6	23.8	27.6	32.0	38.2	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	4.3	4.4	4.6	4.8	5.0	5.1	5.2	5.3	5.3	5.3	5.3	5.2	Romania	EU	
AWG risk scenario	4.3	4.6	5.1	5.4	5.8	6.0	6.2	6.4	6.5	6.5	6.5	6.4	0.9	0.9	
													2.1	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	19.7	19.3	18.6	18.0	17.5	17.1	16.7	16.3	16.0	15.7	15.3	15.0	Romania	EU	
													-23.9	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.24. SLOVAKIA

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

GDP per capita in PPS in Slovakia is at 21,600 and below EU average of 29,600 in 2015. Slovakia's current population stands at 5.4 million people in 2015 and has been fairly stable throughout the decade. The projections reveal a decrease from 5.4 million people in 2016 to 4.9 million in 2070.

Total and public expenditure on health as % of GDP

Total expenditure on health as a percentage of GDP (7.0% in 2015) is below the EU average (10.2%). It has increased from 5.4% in 2003, but is lower than that registered peak in 2009 (8.5% of GDP) and decreased by 1.1 pps only in a year. Total public expenditure on health as a percentage of GDP is below the EU average (in 2015 it was 5.6% compared to 8.0% in the EU). Looking at health care without long-term care⁽³²²⁾ reveals a similar picture with public spending below the EU average (5.6% vs. 6.8% in 2015). Total (1,556 PPS in 2015) and public (1,246 PPS in 2015) per capita expenditure are lower than the EU average (3305 PPS and 2,609 PPS)⁽³²³⁾.

Expenditure projections and fiscal sustainability

Public expenditure on health care is projected to increase by 1.2 pps of GDP ("AWG reference scenario"), much above the average increase of 0.9 pps for the EU. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 2.6 pps of GDP from now till 2070 compared to the EU average of 1.6 pps⁽³²⁴⁾.

Over the long run, medium fiscal sustainability risks appear for the Slovak Republic. These risks

⁽³²²⁾ To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

⁽³²³⁾ Note that these PPS figures reflect current plus capital health expenditure in contrast to EUROSTAT data series, which reflect current expenditure only.

⁽³²⁴⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

derive primarily from the projected impact of age-related public spending (notably healthcare and pensions)⁽³²⁵⁾.

Health status

Despite showing an improvement, the health status of the Slovak population lags slightly behind the EU average. While showing a consistent increase, life expectancy (80.2 years for women and 73.1 years for men in 2015) is still below the EU average (83.3 for women and 77.9 for men). So are healthy life years (55.1 years for women and 54.8 years for men in 2015 vs. EU average of 63.3 and 62.6 respectively), which have been interestingly showing a decreasing trend after 2007, only to start picking up again over the recent years. Amenable mortality rates show a consistent decrease over the decade but are still fairly high notably compared to other countries of similar GDP per capita (e.g. 250 per 100,000 inhabitants in Slovakia for 2015 and 127 in the EU). Infant mortality is also above the EU average (5.1‰ vs. 3.6‰ in 2015).

System characteristics

System financing, revenue collection, population coverage and role of private insurance and out-of-pocket payments

The Slovak health care system is a compulsory social health insurance scheme covering all residents. In practice, a small share of the population (about 4% in 2011)⁽³²⁶⁾ does not pay the required contributions⁽³²⁷⁾ and is not covered if they are not entitled to automatic membership⁽³²⁸⁾. Insured persons are allowed to choose health insurance fund among three health insurance companies. The State pays the contributions of some population groups (dependent children,

⁽³²⁵⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽³²⁶⁾ Source: http://www.udzs-sk.sk/documents/14214/21128/Sprava_o+stave+vykonavanja+VZP_2014_final.pdf/d1948cc6-023c-4529-be7d-15022d29f5ea.

⁽³²⁷⁾ For all the economically inactive people health contributions are paid by the state. The aforementioned 4% comprises of the self-payers, self-employed persons and employers who do not pay the required insurance even though they should.

⁽³²⁸⁾ Old-age pensioners, persons on early retirement or those receiving a disability pension whose degree of incapacity is 70% or more.

pensioners, persons taking care of children aged up to 3 years, all students up to the age of 26, full-time postgraduate students up to the age of 30, PhD students and other groups) to ensure their coverage.

Public health insurance is assured by three health insurance companies (HICs), one of which is state-owned and two of which, have the form of private joint stock companies. The market is dominated by the state-owned company, whose share amounts to 63% of the total insurers in 2016 ⁽³²⁹⁾.

Mandatory insurance contributions vary according to groups: 14% of the gross monthly earning for employees (employers pay 10% and employees 4%, 7 % for disabled persons (the self-employed pay 7%, and for the employed the employer pays 5% and employee pays 2%) and self-employed. The minimum assessment base for the groups equal the average wage divided by two. The contributions paid by the State on behalf of some population groups (dependent children, pensioners, persons taking care of children aged up to 3 years) amounted to 4.4% of the average wage in 2016.

In 2015, the Government approved a reform of the social protection contributions to incentivise low-wage labour supply and demand. It includes a health contribution allowance (HCA), for an income up to €380, which was equal to the minimum wage in 2015, though the allowance is fixed to this amount and is not supposed to be automatically adjusted to the increase in minimum wage. For an income above the €380 up to €570 per month, the health contribution allowance gradually decreases. Deductible allowances are only applicable for income from employment, while when determining the entitlement other revenues are also considered. The cash shortfall of revenue of HICs (amounting to 0.21 % of the GDP in 2015) was compensated from the state budget.

Moreover, a risk equalisation scheme has been introduced by the State which can redistribute companies' revenues in order to compensate between insurance companies for the existing demographic and socio-economic differences of the insured. Redistribution criteria include sex,

⁽³²⁹⁾ Source: http://www.udzs-sk.sk/documents/14214/92018/VE_11_2018_sprava_stav+VZP_2017.pdf/c5568cdb-9177-4db6-be25-86fd82bc9425.

age, costly chronic diseases (so called Pharmacy Cost Groups) and the number of policyholders whose contribution is paid by the State ⁽³³⁰⁾. New schemes will be introduced in 2019. Especially the Multiple-Year High Cost (MYHC) groups, which additionally redistribute the risk among cost-similar policyholders.

In 2015, 68% of total health expenditure funding came from mandatory health contributions plus 6.7% government sources (direct and indirect taxes collected centrally). The remaining part is private expenditure on health including private health insurance and out-of-pocket payments. A large part of private expenditure is out-of-pockets (though not necessarily cost-sharing for publicly goods and services as explained below) which represent 18.4% of total expenditure on health (EU average of 15.9% in 2015). This is nevertheless lower than in previous years.

Small lump-sum fees (co-payments) for many medical services and goods were introduced in 2003 with the aim of controlling consumption but in 2006 most of them were abolished (primary and specialist outpatient care, hospital stays) or considerably lowered (prescriptions for medicines). Following the changes in 2006, various payments were introduced by individual healthcare providers. In 2015, the government passed legislation to regulate payments by banning e.g. payments for appointments at a scheduled time. However, the media have since reported that new payments have been introduced to bypass the legislation ⁽³³¹⁾. In addition to cost-sharing for medicines, fees apply to emergency services, ambulance transportation and spa treatment. A small number of services (e.g. in dental care ⁽³³²⁾ and cosmetic surgery) are not covered. The aim of introducing fees was to limit excess demand and ensure a coherent path of care. However, there were concerns for the already high private expenditure and they were abolished. Note that in addition to formal out-of-pockets there are persistent, considerable and unmeasured informal payments. These are not adjusted to individual

⁽³³⁰⁾ <http://www.zakonypreludi.sk/zz/2004-580>.

⁽³³¹⁾ <http://www.health.gov.sk/?poplatky-v-zdravotnictve>.

⁽³³²⁾ Standard dental care is covered, but the use of non-standard materials is not: <https://www.vszp.sk/poistenci/zdravotna-starostlivost/kedy-platit-za-zdravotnu-starostlivost.html> or <http://www.dovera.sk/najcastejsie-otazky/a295/co-mi-preplatite-u-zubara>.

socio-economic characteristics, so they can have a negative impact on access and discourage a more effective use of services. The design of cost-sharing is an area that may require further policy analysis.

The share of voluntary private health insurance of total current health expenditure in 2015 was only 1.8%. Private health insurance in Slovakia has mostly a supplementary function covering non-essential services not provided under social health insurance.

The State defines annually health care expenditure targets for different health services but overshooting is possible. The State can influence the volume of funds available to the HIC. Furthermore, it can influence spending through regulation in particular areas (e.g. price-setting for medical rescue services). However, on the whole, it is up to the HIC to decide on healthcare spending.

Administrative organisation: levels of government, levels and types of social security settings involved, Ministries involved, other institutions

The Ministry of Health develops the national health policy strategy, defines public health and policy priorities and provides the overall management of the health care system as a whole. The Ministry of Health and the Office for the Supervision of Health Care regulate and supervise the activity of the health insurance companies.

The contracts between HIC and inpatient and outpatient providers regulate only the mandatory list of services covered by public health insurance, whereas prices and detailed conditions are negotiable without regulation. The network of strategic public healthcare providers and general practitioners are privileged⁽³³³⁾ as HIC are obliged to sign contracts with all these hospitals and their departments. Other providers or certain types of

⁽³³³⁾ These healthcare providers (HCPs) were selected by the government as “strategic providers”. The majority is public, however a growing proportion is privately owned. HICs are obligated to conclude contracts with these HCPs, no matter what the quality of their service provision is. This makes strategic providers privileged compared to non-strategic HCPs. Only hospitals have been designated strategic, not GPs.

their services may be omitted from contracting. Reimbursement of pharmaceuticals is regulated via a specified list of medicines with fixed prices and reimbursement levels.

There are constraints on the health insurance companies’ use of profits made from public insurance and payments for health care provision. In 2007, the government banned the use of profits to pay dividends. In 2011, the Constitutional court found this was not in line with the Constitution. As of 2011, HICs may again use profits to pay dividends. However, conditions apply, that is before paying out dividends, HIC must create 1. reserves for the provision of planned healthcare (i.e. healthcare to be provided to patients on waiting lists) and 2. a separate reserve fund at least to the value of 20 % of common capital stock.

Coverage of services, types of providers, referral systems and patient choice

A wide range of health care services and goods is provided through a network of private and publicly owned facilities contracted by insurance companies: primary health care, outpatient specialist consultations and hospital care (day-case and inpatient), emergency and transporting medical services, and a range of related services including imaging diagnostic services, laboratories⁽³³⁴⁾, physiotherapy, dialysis care, home nursing agencies and hospices. Health insurance companies have to contract all general practitioners and pharmacies and a specified minimum number of specialists and hospitals.

The provision of health care is decentralised and based on a public-private mix. Public and private health care providers sign contracts with the health insurance companies in order to be eligible for reimbursement. General practitioners (GPs) and outpatient specialists can be independent private providers or public providers. Most private

⁽³³⁴⁾ A comparison of spending data among EU countries (based on available Eurostat data) shows that per capita spending on laboratories and diagnostic imaging in Slovakia is higher than the EU average level, 70 and 40 PPS per inhabitant respectively in 2015. The average spending of Hungary, Poland and the Czech Republic is significantly lower and well below the EU average. Similarly, spending on transportation and medical rescue services in Slovakia is with 40 PPS per capita above the EU average (30 PPS per capita), though comparable with the spending in Poland and the Czech Republic in 2015.

primary care providers have contracts with health insurance companies. Only some private primary care providers such as dentists are working on the basis of direct payments from patients and without a contract with health insurance companies. There is some current policy discussion on encouraging group practices rather than individual practices.

Patients have to register with a GP whom they can choose freely. A so-called "exchange card", introduced in 2008, works as a referral tool from a GP to a specialist or hospital. The aim is to have GPs referring patients for specialist care, operating as gate-keepers. Since 1 April 2013, the GP referral system is in operation again, after it was abolished in 2010. However, the system does not work for all specialties (e.g. accident and emergency, chronic care, outpatient psychiatric care, dentists, ophthalmologists, dermatologists and gynaecologists are exempted) and it does not appear to be very effective due to shortages of GPs especially in certain areas ⁽³³⁵⁾. This is something the authorities see as a policy priority.

Secondary and tertiary care are provided in a number of general and specialised hospitals, polyclinics, hospices and nursing homes. The ownership and management of most public institutions has been decentralised from central to regional level. The 2007 reform introduced healthcare districts, whereby all GPs, gynaecologists and dentists are obliged to provide care to each patient resident in their respective territorial districts, who in turn has the right to choose freely his/her physician. Moreover, a minimum network of public health care providers was established (including 37 hospitals, a part of which is now privately owned) ⁽³³⁶⁾, which have to be contracted by the health care companies. While choosing the providers beyond the list of minimum public network each fund could establish its own evaluation criteria. The government adopted an official list of indicators to assess the quality of providers.

⁽³³⁵⁾ In 2014, the government introduced a residential program to facilitate the training of GPs and paediatricians for rural areas (<http://www.health.gov.sk/?rezidenti>). The aim is to train 100-150 doctors a year (<http://www.health.gov.sk/?faq-rezidenti>).

⁽³³⁶⁾ <https://www.vszp.sk/poistenci/zdravotna-starostlivost/pevna-siet-poskytovatelov-k-1-1-2016.html>.

In case of out-patient medical treatment, there is direct access to the primary care physician contracted by the health insurance company (information about the contracted physicians shall be provided by each of the health insurance companies). If the specialist outpatient care is needed, the referral of primary care physician is requested. Patients do not pay for the specialist outpatient care provided ⁽³³⁷⁾. When hospitalisation is needed, the referral of GPs is requested except in case of immediate hospitalisation. In this case the patient does not have to pay a fee for the health care provided.

There is direct access to the contracted dentist (information on the contracted dentists shall be provided by each health insurance company). There is a "standard" dental treatment which is reimbursed by the public health insurance. The price difference for additional treatment or above-standard is paid by the patient. The price of non-standard treatment is determined by each dental practice and varies between clinics. The dentist is obliged to inform the patient in advance about the expenses for services with private co-payment and about the expenses of direct payment and in what amount.

User fees are applied to emergency care, differentiating between outpatient and hospital emergency care. In the case of hospital emergency care (Medical First Aid or Hospital Emergency Service) a fee of €10 applies to all patients, except to those who had an immediate accident or had been hospitalised on the grounds of the emergency health condition. Conversely, the fee for outpatient emergency care is €2 and is meant to serve patients with non-acute health problems.

Some primary and specialist outpatient care also take place in specialists' private individual or group practices and some hospital care takes in private clinics and hospitals at the cost of patient.

The number of practicing physicians per 100,000 inhabitants (345 in 2015) is at the EU average (344 in 2015). The number of GPs per 100,000 inhabitants (42 in 2007, latest available data) is also below EU average (78.3 in 2015). The numbers suggest that the skill mix may need to

⁽³³⁷⁾ In practice, fees may apply. Fees are mostly related to accompanying services and administrative steps.

improve to ensure a good distribution of GPs, currently deemed unequal by the authorities, and the effectiveness of the referral system and the GPs' gatekeeping role which the authorities want to reinforce. Indeed, this is one of the policy priorities of the Slovak authorities with the introduction of the residential programme for GPs. Acute hospital beds stand at 488 per 100 000 inhabitants and are higher than the EU average of 402 per 100 000 inhabitants in 2015, though showing a reduction over the last decade.

A next consideration to be made is the existence of staff supply regulations. As it turns out, there are no quotas for medical students as the pool of graduated medical students through the entire hierarchy is sufficient. The location of physicians is partially managed by HICs since each HIC manages its own minimal network of physicians depending on the geographical density of their clients. Specialists in locations with fewer patients have more convenient contracts.

Purchasing and contracting of healthcare services and remuneration mechanisms

Primary care physicians are paid mainly on a capitation basis. Specialists are paid on a fee-for-service basis. The current system of financing health care is based on a combination of a point and fixed price system. For outpatient care, each medical service has a point value listed by the Slovak Ministry of Health. As the list of medical services with assigned point values is not being updated regularly and new services/ procedures are being introduced, HICs now set fixed prices for these, rather than setting a point value.

Assessing and adjusting hospital remuneration is something the authorities have indicated as a policy priority. Until 2017, for inpatient care, hospitals were typically paid fixed-rates for long-terms stays of chronic patients. For most hospital stays hospitals got payments per discharge. These depended on the department and were negotiated by HICs and HCPs⁽³³⁸⁾. From 2017 on, a diagnostic-related group-linked payment mechanism (DRG) started to be gradually implemented. In 2017, individual hospitals had

individual rates in order to avoid significant financial fluctuations and destabilisation of the inpatient sector. Every HIC has its own safety net system, allowing for additional payments should the DRG-based payment substantially deviate from the original payment mechanism (payment for hospitalisation/discharge) of the hospitals. The safety nets ensure stability in payments to individual providers. A five-year convergence process of individual rates to a single nation-wide basic rate will be initiated in 2018 and should be completed by 2022.

Health insurance companies are responsible for contracting hospitals. They sign contracts with health care providers for different quantity of health care services on the basis of selected regional needs. They have the possibility to differentiate the quantity of health care services purchased according to the quality of providers. As of 2018, HICs have introduced payment via global budgets (equal monthly payments based on 6 months average of previous term), which has to be based on DRG reporting. It serves as another safety net to avoid under-financing.

The number of physicians' consultations per capita is well above the EU average (11.4 vs. 6.3 in 2015). When looking at hospital activity, inpatient discharges are higher than the EU average (respectively 19.3 vs. 16.2 per 100 inhabitants) in 2015. Hospital average length of stay for curative care is slightly below the EU average (7.2 days vs. 7.6 days in 2015).

The market for pharmaceutical products, the use of Health Technology Assessment and cost-benefit analysis

Medicines are divided into three categories by law according to their clinical performance and economic evaluation: medicines fully paid by the health insurance; medicines partially paid by the health insurance company and with co-payment by patients; and medicines fully paid by patients. The physician who prescribes the medicines is obliged to inform patients on the reimbursement category, in which a medicine is placed. The pharmacy is obliged to issue the receipt of the amount of overall payment and the private co-payment.

A number of measures have been adopted to control pharmaceutical expenditure. In addition to

⁽³³⁸⁾ Source: http://hpi.sk/cdata/Publications/hpi_zakladne_ramce_2014.pdf.

price reductions, external reference pricing and a regressive mark-up were introduced in recent years. The initial model was based on the referencing of prices against the average of six lowest prices in the EU. In 2011, referencing was tightened, so that drug prices could not exceed the level of the second lowest price in the EU. As of 2013, prices are referenced at the level of the average of the three lowest prices for a given drug in the EU. Slovakia has established a greater use of generics as a policy priority.

In June 2016, the international reference pricing has been extended to medical devices and specialised medical material. At first 535 medical devices representing 11% of all medical devices were referenced leading to immediate price reduction of about 21% on average compared to prices in the previous year. Selected medical materials (such as pacemakers, stents, and defibrillators) were included as well. Next, in October 2016, the reference pricing was expanded to include all medical materials.

Some groups of medicines that are used in outpatient care are procured centrally by insurance companies (for example, vaccines, oncological medicines, etc.). Hospitals purchase pharmaceuticals on their own from their budgets.

E-Health, Electronic Health Record

During 2017, all doctors were connected to an eHealth environment. Selected eHealth elements, such as a National health portal, ePrescription, eMedication, electronic health documentation and eAllocations, have become functional at the beginning of 2018. However, there are no intentions to fully replace paper-based health documentation with eHealth forms.

Health promotion and disease prevention policies

The need to improve health status further through promotion and prevention activities is a policy priority. Slovakia spends less on prevention and public health services than the EU average (2.2% of public current health expenditure relative to 3.1% in the EU in 2015).

Transparency and corruption

The contracts between HICs and healthcare providers are published online mandatorily. All contracts of state-owned healthcare providers are also mandatorily published online (including public procurement contracts). Online publishing is also used as a tool to put into transparency any interactions among physicians and pharmaceutical companies. The companies have to publish a list of doctors who took part on the organised by them medical congresses and conferences. Since July 2016, companies publish all transfers of value to health care providers (e.g. doctors and nurses), including the name of the health care provider, the value and purpose of the transfer of value (both financial and non-financial) ⁽³³⁹⁾.

Recently legislated and/or planned policy reforms

Health insurance

The system of risk compensation in public health insurance was extended by adding the morbidity parameter through classification of policy holders in pharmaceutical cost groups (PCG). Since the second half of 2012, the revenues of insurance companies have thus been following real costs of treatment of their policy holders.

Reform of primary care

The average number of patient visits per year in Slovakia is almost twice as much compared with the EU average (11.4 vs. 6.3 in 2015). One reason for this is a poor integration of health care providers which is demonstrated by a high degree of fragmentation of primary health care providers; where 2,933 territorial units ⁽³⁴⁰⁾ (municipalities) exist with a total of 2,863 primary care physicians ⁽³⁴¹⁾. The other problem is the high rate of referrals; a high number of patient visits indicates inadequate patient management by primary physicians, where more than 80% of patients with chronic disease are transferred from the first contact with a GP physician directly to a hospital

⁽³³⁹⁾ <http://www.health.gov.sk/Clanok?mz-zavadza-transparentnejsie-pravidla-pri-zverejnovani-vydavkov-farmaceutickych-firiem-na-propagaciu-a-marketing>.

⁽³⁴⁰⁾ <http://www.vlada.gov.sk/slovensko>.

⁽³⁴¹⁾ Source : http://www.nczisk.sk/Documents/publikacie/analyticke/zdravotnictvo_slovenskej_republiky_v_cislach_2014.pdf.

specialist. The Ministry of Health has taken actions to proportionally change the redistribution of patients visits from nowadays 80% managed by specialists and only 20% fully managed by GPs to around 60% and 40% in the next few years. Efforts to make the profession of a general practitioner more attractive are continuing, in order to attract young doctors. The Ministry of Health has legislatively defined a new form of preparation of general practitioners already during their university studies, and as from July 2014, GPs have the possibility to perform pre-operation examinations of patients with common diseases. In 2015 legislation was passed allowing GPs broader rights in treating chronic patients, previously treated by specialists (e.g. patients with diabetes).

Improving the financial management and economy of providers

The Slovak Government undertakes measures to ensure that, on average, health care facilities established by the Ministry of Health of the Slovak Republic will operate on a balanced budget without needing additional financial assistance from the state budget and that their indebtedness will be considerably reduced. The indebtedness of state hospitals has not slowed down since 2012⁽³⁴²⁾. Thus, a newly established unit for the management of hospitals operated by the Ministry of Health together with supervisory bodies in hospitals should reinforce surveillance and help improve financial management of state-owned hospitals.

The financial management of hospitals needs to be set in a manner that rewards performance and efficiency. However, prior to introducing performance-based remuneration of executive managers, it is necessary to ensure systematic collection, monitoring and evaluation of the relevant indicators. Correctly set financial management of hospitals may considerably help prevent the accumulation of debts and thus increase the efficiency of spending. Hospital managements should also focus on operational

savings by curtailing duplication of processes and personnel.

Savings in the procurement of energy, materials, services and other inputs used by hospitals can be achieved by centralising purchases at the level of hospitals' managements. Furthermore, with the introduction of central procurement, hospitals will be able to spend their funds more effectively without compromising on the treatment of patients. Centralised procurement by the Ministry of Health continues and is already implemented in state-owned hospitals. A framework agreement set up first for the procurement of CT technology, will be now also used for procurement of MRI technology and hospital beds.

Better integration of healthcare provision

One of the planned steps, conducive to stabilise expenditure, is the introduction of an integrated model of health care provision. The position of general practitioners is supposed to be further reinforced in order to reduce more expensive treatment in hospitals and by specialist physicians. The residency programme will bring a new generation of general practitioners and help improve the treatment management process. Medical students will be required to undergo a period of training in outpatient facilities already during their university studies. Following the completion of their study programmes, graduates will be required to work for a certain number of years in outpatient facilities in Slovakia. One of the key components of the integrated model of health care provision will include the application of e-Health in practice.

An insufficient coordination of the current types of establishments in the treatment process often leads to cases where more specialised and costly healthcare provider than medically necessary is dealing with relatively simple medical cases. A clear definition of the types of hospitals and the extent of care provided by them and a better coordination of involvement of outpatient and inpatient facilities in individual stages of treatment could help increase the efficiency in the use of capacities. Hospitals types should be defined according to the extent of healthcare provision. The portfolio of healthcare provision should reflect the variability of cases and the levels of difficulty so that adequate capacity is achieved for the needs

⁽³⁴²⁾ According to data provided to the Ministry of Finance by the Ministry of Health, in 2012 the indebtedness of hospitals affiliated with the Ministry of Health grew by €3 million, in 2013 by €5 million. In 2014 the rate slowed down to €1 million, but in 2015 it again rose to €108 million. At the end of 2017 total indebtedness reached €791 million.

of the catchment area. At the same time, the coordination between outpatient and inpatient establishments should improve. The aim will be to set the system in a way that will allow providers at each level to be used in individual cases so that staff and physical resources would not be wasted. Particular setting and detailed definitions will be gradually profiled in the Strategic Healthcare Framework for 2014 – 2030 which is an ex ante conditionality for using EU financial resources. In 2018, the Ministry of Health has introduced in cooperation with HICs the stratification plan of hospitals which should reform the current system and implement new set of rules for selective contracting based on evidence-based hospital referral (EBHR – minimal quantitative standard for achieving sufficient quality of care). New hospital typology is crucial in this endeavour and therefore it is important to achieve great consensus on political and also on health care providers level.

Introduction of diagnosis-related group (DRG) payments

With the introduction of diagnosis-related group payments by 2022, it will be possible to identify internal reserves of resources in the public health insurance system, increase transparency in the relations between insurance companies and hospitals and manage them in a meaningful and effective manner. For every hospital case, the DRG system will assign a portion of funds set in advance – based on diagnosis, procedure, age, gender, presence of other diseases or complications and other measurable criteria. If an identical procedure is performed during the treatment of an identical diagnosis, every hospital will receive the same amount from an insurance company. DRG payments will provide a transparent healthcare funding system for inpatient healthcare facilities, thus bringing more fairness to the funding of healthcare providers. The creation of a uniform platform for the funding of the provided hospital services in the form of the DRG system will contribute to the possibility to compare healthcare provided in the individual healthcare facilities, and a broader scope of information will be collected for decision-making and control.

In 2018, hospitals are being reimbursed via global budgets, which represent an equal monthly payment. The budget has to be “filled” from DRGs

and if there is a 20% difference between reporting and payments, the HIC or the provider are obliged to start new negotiations. At the same time, a five-year convergence process has been initiated, insuring the transition from individual hospital rates to single nation-wide basic rates in 2022.

Construction of a modern hospital in Bratislava

Along with the adoption of measures aimed at stopping the growing indebtedness of hospitals, investments will be made in acute hospitals which will replace some of the most obsolete and least efficient facilities. The intention to build a new hospital in Bratislava was included in the 2016 government manifesto and will be financed from public funds.

Challenges

The analysis above shows, that a range of reforms have been started/implemented in recent years. However, when it comes to the efficiency of health care provision, Slovakia’s performance is relatively low ⁽³⁴³⁾. The main challenges for the Slovak health care system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to perceived current inefficiencies, such as high spending on ancillary services (diagnostic imaging, laboratories, transportation and medical rescue services), pharmaceuticals and medical goods, as well as the increasing health care expenditure over the coming decades. This is a risk to the long-term sustainability of public finances.
- To introduce an integrated care model, e.g. by establishing health centres and devising and implementing the master plan for an effective geographic distribution of health care resources, by safeguarding accessibility and delivering efficiency gains.
- To further promote the supply of general practitioners by removing the restrictions on the volume and range of primary health services, introducing the performance element to payment schemes, and improving the attractiveness of being a general practitioner.

⁽³⁴³⁾ <http://www.finance.gov.sk/Default.aspx?CatID=8789>.

- To ensure balanced hospital budgets by improving the efficient utilisation of resources, hardening budgetary constraints, improving guidance and supervision in procurement processes and enhancing payment systems, by introducing a diagnosis-related groups payment system as planned currently. To continue recent efforts to optimise the utilisation of acute care beds (low bed occupancy rates imply an excess of hospital beds which may lead to inefficiency in the operating costs of hospitals), by introducing effective referral system and control of admissions. To implement stratification of hospitals to increase quality of care and achieve better allocation of resources.
- To implement measures for a comprehensive streamlining of public hospital care, including transforming acute care beds into long-term care beds. A new hospital typologisation can be instrumental in this endeavour and it is therefore important to achieve consensus on political and health care providers level.
- To promote the rational use of medicines by combining different policies, such as electronic prescription, monitoring and guidelines linked with electronic systems and providing feedback to physicians appears an effective way of improving prescription behaviour. This may reduce the risk of over-prescription and wrong co-medication. To introduce a national procurement system for pharmaceuticals in order to enhance the bargaining power of hospitals against pharmaceuticals companies.
- To fully implement and extend the pilot project on 'e-health' information tools, including electronic health records and e-referrals, aiming to improve coordination between inpatient and outpatient care and to limit overuse of services and pharmaceuticals.
- To continue to improve data collection and monitoring of inputs, processes, outputs and outcomes so that regular performance assessment can be conducted and used to continuously improve access, quality and sustainability of care.

Table 2.24.1: Statistical Annex – Slovakia

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	39	46	56	66	64	68	71	73	74	76	79	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	15.0	16.1	17.7	18.5	17.5	19.0	19.2	19.6	19.8	20.6	21.6	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	6.7	8.4	10.7	5.4	-5.6	4.8	3.4	1.5	1.4	2.6	3.8	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	13.0	16.5	2.4	9.1	2.5	-3.2	4.0	1.8	3.2	-9.5	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	6.9	7.2	7.6	7.3	8.5	8.3	7.8	8.0	8.0	8.1	7.0	10.2	10.1	10.1	10.2
Total current as % of GDP	5.5	5.5	6.5	6.6	6.9	7.2	7.0	7.6	7.5	6.9	6.9	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.4	1.7	1.1	0.7	1.6	1.1	0.8	0.3	0.5	1.1	0.1	0.9	0.6	0.2	0.3
Total per capita PPS	769	928	1,206	1,374	1,538	1,585	1,551	1,633	1,671	1,724	1,556	2,745	2,895	2,975	3,305
Public total as % of GDP	5.2	5.0	5.2	5.5	6.1	5.9	5.7	5.6	5.7	5.7	5.6	8.0	7.8	7.8	8.0
Public current as % of GDP	5.1	4.9	5.1	5.4	6.0	5.8	5.6	5.5	5.6	5.6	5.5	7.7	7.6	7.6	7.8
Public total per capita PPS	583	652	833	1,028	1,102	1,120	1,141	1,150	1,191	1,216	1,246	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.14	0.13	0.11	0.12	0.12	0.11	0.12	0.10	0.11	0.13	0.13	0.2	0.2	0.2	0.2
Public as % total expenditure on health	75.8	70.2	69.1	74.8	71.7	70.6	73.6	70.5	71.2	70.6	80.0	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	18.8	19.3	21.7	18.9	17.3	16.9	17.1	17.2	17.4	16.7	15.7	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	97.6	96.3	95.5	95.4	95.4	95.4	95.2	95.0	94.6	94.2	93.8	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	23.6	26.6	27.4	26.1	26.9	27.2	23.6	23.2	23.3	18.0	18.4	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	502.1	503.0	505.2	508.5
Life expectancy at birth for females	78.1	78.4	78.4	79.0	79.1	79.3	79.8	79.9	80.1	80.5	80.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	70.2	70.4	70.6	70.9	71.4	71.8	72.3	72.5	72.9	73.3	73.1	76.6	77.3	77.7	77.9
Healthy life years at birth females	56.6	54.6	56.1	52.5	52.6	52.0	52.3	53.1	54.3	54.6	55.1	62.0	62.1	61.5	63.3
Healthy life years at birth males	55.2	54.5	55.6	52.1	52.4	52.4	52.1	53.4	54.5	55.5	54.8	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	92	86	102	116	110	105	262	261	262	243	250	64	138	131	127
Infant mortality rate per 1 000 live births	7.2	6.6	6.1	5.9	5.7	5.7	4.9	5.8	5.5	5.8	5.1	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Inpatient curative and rehabilitative care	1.9	1.5	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.9	2.0	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.0	:	0.0	0.0	0.0	0.0	0.0	:	:	0.0	0.0	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.2	1.6	1.7	1.6	1.9	1.8	1.8	1.9	1.9	1.5	1.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	2.2	2.2	2.2	2.2	2.4	2.4	2.2	2.0	2.0	1.9	1.9	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.5	0.6	0.6	0.6	0.8	0.8	0.7	0.7	0.7	0.5	0.6	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.3	0.4	0.4	0.4	0.5	0.2	0.3	0.2	0.1	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.9	1.2	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	:	:	:	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	0.8	1.1	1.2	1.3	1.5	1.3	1.4	1.3	1.4	1.4	1.3	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.7	1.6	1.5	1.6	1.7	1.7	1.5	1.4	1.3	1.3	1.3	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Prevention and public health services	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.24.2: Statistical Annex - continued – Slovakia

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	34.3%	27.5%	25.6%	25.2%	26.4%	25.2%	24.0%	21.6%	23.8%	27.3%	28.3%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	0.0%	:	0.0%	0.0%	0.0%	0.0%	0.0%	:	:	0.6%	0.6%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	21.4%	29.0%	25.9%	24.6%	28.1%	24.8%	25.5%	24.4%	24.9%	22.0%	22.4%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	40.6%	40.1%	33.5%	33.6%	35.4%	33.1%	31.3%	26.6%	26.5%	27.0%	26.9%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	9.8%	10.3%	9.4%	9.1%	10.9%	10.4%	10.0%	9.1%	9.2%	7.5%	8.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.9%	5.9%	5.7%	5.6%	6.1%	6.3%	3.0%	4.2%	2.1%	1.9%	2.2%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	5.1%	5.3%	4.2%	4.7%	4.2%	4.0%	3.7%	3.3%	3.4%	4.2%	3.2%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	36.8%	25.3%	26.6%	26.0%	25.8%	26.6%	28.4%	29.7%	30.4%	31.0%	32.1%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	:	:	:	:	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	15.2%	22.8%	24.3%	24.5%	25.5%	23.3%	24.3%	24.2%	24.9%	24.3%	24.4%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	32.5%	32.4%	29.4%	29.4%	28.5%	28.7%	27.1%	24.7%	23.8%	24.1%	23.9%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	2.8%	3.3%	3.1%	3.2%	3.4%	3.3%	3.6%	3.6%	3.7%	3.8%	4.0%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	1.8%	2.6%	2.9%	2.8%	3.0%	3.0%	1.6%	1.5%	1.5%	1.8%	2.4%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	5.5%	5.9%	5.5%	5.8%	4.9%	5.0%	4.8%	4.6%	4.5%	5.2%	4.0%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.43	0.45	0.57	0.61	0.61	0.68	0.70	0.63	0.67	0.83	0.88	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	0.8	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	1.1	1.2	1.4	1.4	1.3	1.4	1.5	1.6	1.5	1.7	1.8	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	15.1	15.1	:	:	:	:	15.9	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	:	:	19.3	19.5	:	:	:	:	22.9	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	10.8	10.3	10.6	11.4	10.6	10.1	10.2	10.1	9.9	10.6	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	304	317	300	337	330	336	331	336	339	343	345	324	330	338	344
Practising nurses per 100 000 inhabitants	632	633	662	658	637	640	628	580	580	:	:	837	835	825	833
General practitioners per 100 000 inhabitants	:	:	42	:	:	:	:	:	:	:	:	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	11.3	10.4	11.2	12.1	11.6	11.6	11.0	11.2	11.0	11.3	11.4	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	18	18	17	18	18	18	18	:	:	19	19	17	16	16	16
Day cases discharges per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	0	0	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	67.0	68.0	67.9	67.5	67.3	66.5	65.5	67.3	67.4	68.9	68.7	77.1	76.4	76.5	76.8
Hospital average length of stay	7.3	7.2	8.6	8.5	8.3	8.2	8.0	7.5	:	7.3	7.2	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	:	:	:	:	:	:	:	:	0.0	0.0	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.6	5.8	6.0	6.2	6.5	6.6	6.8	6.9	6.9	7.0	6.9	6.8	Slovakia	EU	
AWG risk scenario	5.6	5.9	6.4	6.9	7.3	7.6	7.9	8.1	8.2	8.3	8.3	8.1	1.2	0.9	
													2.6	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	5.4	5.5	5.5	5.5	5.4	5.4	5.3	5.3	5.2	5.1	5.0	4.9	Slovakia	EU	
													-9.5	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.25. SLOVENIA

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

Slovenia has a population of just above 2 million inhabitants, which is slightly more than 0.4% of the EU population. With a GDP of 39 billion, or 22,600 PPS per capita in 2015 it scores lower than the EU weighted average (29,600). When looking at the unweighted average and at the median level though, respectively 25,200 and 22,100 PPS, Slovenia faces a significantly lower gap, standing at 89.7% of the average, and closely resembling the median. However measured, this gap is mainly due to the economic crisis which since 2008 reduced the national income, whereas in 2008 Slovenia's GDP level in PPS per capita was 91% that of the EU average.

The Slovenian population is projected to decrease from 2.1 million in 2015 to 2 million in 2070, a decrease of 5% in comparison to the EU average increase of 2%.

Total and public expenditure on health⁽³⁴⁴⁾ as % of GDP

In 2015 total expenditure on health care amounted to 8.9% of GDP, having slightly increased, though not steadily, during the last decade (8.3% in 2005). This is below the EU average of 10.2%, when looking at weighted average. Looking at the unweighted average and at median EU values however, respectively 8.7% and 8.9%, the level of total health expenditure in Slovenia is slightly higher than the former and at the same level of the latter EU values. The same applies to public expenditure on health care, broadly constant over the last decade (+0.4 pps) and accounting for 6.5%⁽³⁴⁵⁾ of 2015 GDP, which is below the EU⁽³⁴⁶⁾ average of 8% when looking at the weighted figure, but is higher both than the unweighted (6.4%) and than the median (6.2%) values. Also when measured in per capita terms, both total and public health care expenditure are lower than the EU weighted average: 2,002 PPS vs. 3,305 PPS

⁽³⁴⁴⁾ This aggregate includes capital investments.

⁽³⁴⁵⁾ Including public long-term health expenditure (HC.3) and capital investments.

⁽³⁴⁶⁾ This figure refers to the weighted average.

and 1,460 PPS vs. 2,609 PPS respectively (figures for 2015 in €PPS). Comparing these values to unweighted average (2,526 PPS) brings Slovenia closer though not above average, but it places Slovenia at the median (2,002) for the total figure. With an unweighted average value of 1,894 and a median of 1,460, a similar reasoning applies to public health expenditure PPS, with Slovenia at the median level. Looking at health care without long-term care⁽³⁴⁷⁾ reveals a similar picture, with spending below the EU average, but with a smaller gap (5.7% vs 6.8% in 2015).

As a result of declining revenues of compulsory health insurance contributions (and in view of the target that compulsory health insurance should be financed without any further borrowing or increase in the contribution rate), public health expenditure, declined in real terms in 2012 and 2013⁽³⁴⁸⁾. Since 2014 public health expenditure has been rising in real terms, underpinned particularly by stronger growth in employment and wages and hence higher inflows into the health insurance fund. In 2015 public current public health expenditure reached 6.1% of GDP and total public expenditure, including investments reached 6.5 % of GDP. The share of public expenditure declined from 2010 to 2014, but from 2014 to 2015 it increased up to 72.9%.

Slovenia had already recorded relatively low health expenditure growth before the crisis, but also during the crisis called for strict austerity measures. In the period 2000-2009 health expenditure per capita averaging 4.7% growth per year in real terms in EU28 countries and in Slovenia 4.0%; during the crisis in 2009-2012 it declined to 0.6% in EU28 countries and in Slovenia it fell annually by 0.5% in real terms⁽³⁴⁹⁾.

Expenditure projections and fiscal sustainability

Driven by the change in demographic structure, public spending on health care is projected to

⁽³⁴⁷⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽³⁴⁸⁾ OECD Stat, 2018. Calculations by IMAD (IMAD Development Report 2018, page 120).

⁽³⁴⁹⁾ OECD Health at a glance: Europe 2014 and Institute of Macroeconomic Analysis and Development (2015) Development report 2015. Indicators of Slovenia's Development. Health expenditure.

increase by 18% or 1.0 pp of GDP, more than the 13% average increase in the EU (0.9 pps) according to the "AWG reference scenario" ⁽³⁵⁰⁾. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 2 pps of GDP from now until 2070 (EU: 1.6).

Medium fiscal sustainability risks appear over the medium and the long run due, especially for the long-term risk categorisation, to the projected increase in age-related public spending, notably deriving from pensions, healthcare and long-term care ⁽³⁵¹⁾.

Health status

The indicators of health status of the Slovenian population appear similar to those of the EU average. Life expectancy at birth for both women and men was respectively 83.9 years and 77.8 years in 2015, similar to the EU average (83.3 and 77.9 years for men and women respectively). Nevertheless, in 2015 the healthy life years at birth for both sexes were, 57.7 years (women) and 58.5 years (men), substantially lower than the EU-average (63.3 and 62.6 respectively) ⁽³⁵²⁾. Infant mortality of 1.6‰ (2015) is well below the EU average of 3.6‰.

Mortality rates ⁽³⁵³⁾ from both cancer and cardiovascular diseases have dropped over the last 20 years, but they are still above the EU average (and for men they are the highest in Europe). External causes of death are particularly high for men and women because of the high numbers of falls (particularly in old-age) as well as suicides (mortality from suicide was the fourth highest in Slovenia in 2014).

⁽³⁵⁰⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽³⁵¹⁾ European Commission (2018), Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽³⁵²⁾ Data on life expectancy and healthy life years is taken from the Eurostat database. Data on life-styles is taken from the Eurostat database and the OECD health data.

⁽³⁵³⁾ State of Health in the EU Slovenia Country Health Profile 2017, OECD, Health Observatory and European Commission. https://ec.europa.eu/health/sites/health/files/state/docs/chp_sl_english.pdf.

The lifestyle-related risk factors are in general less prevalent than in the other EU countries. Percentage of regular smokers (18.9% in 2014) was below the EU average in the recorded closest years (20.9% in 2015) and alcohol consumption in 2014 (10.5% litres per capita) was close to the EU average number (10.2 litres per capita in 2015).

System characteristics

System financing, revenue collection mechanism, coverage and role of private insurance and out of pocket co-payments

The Slovenian health system is a Bismarckian system based on statutory health insurance, which is fully regulated by national legislation and administered by the single insurer, Health Insurance Institute of Slovenia (HIIS), an independent public institution. HIIS operates in accordance with the "Stability Pact", whereby HIIS is not allowed to record a loss at the end of the year or go into debt and it cannot itself increase insurance contribution rates ⁽³⁵⁴⁾. The health insurance system is mandatory, providing universal coverage. The extent of rights deriving from compulsory health insurance is specified by the law on health care and health insurance and the regulations on compulsory health insurance, i.e. the act adopted by the assembly of the Health Insurance Institute of Slovenia.

Compulsory health insurance comprises insurance in the case of illness or injury outside work, and insurance in the case of injury at work and occupational diseases. The extent of rights to health care services is defined in percent share of the total service costs. This means that the compulsory health insurance "covers" the majority of health related risks, however, not necessarily all of them and neither in full. The balance is either to be paid by the insured person, or, alternatively and most common, the insured person takes out a complementary insurance policy with a private health insurance company. More than 95 % of the

⁽³⁵⁴⁾ European Observatory on Health System and Policies, World Health Organization and Ministry for Health (2016). Analysis of Health System in Slovenia. Health System Expenditure Review. Final report. http://www.mz.gov.si/fileadmin/mz.gov.si/pageuploads/Analiza/Report_Expenditure_review_Slovenia_FINAL_FOR_MATTED_without_cover.pdf.

population liable for co-payments is insured by voluntary complementary health insurance ⁽³⁵⁵⁾.

In the 2009–2013 period a series of measures were introduced to balance Health Insurance Institute operations. To generate additional revenues measures included increasing contributions for self-employed and requiring contributions from student employers ⁽³⁵⁶⁾. However, the majority of measures focused on reducing expenditure by reducing the prices of health services, transferring a portion of expenditure on health to complementary health insurance schemes, lowering expenditure on medicines, medical devices, sickness allowances and obligations under international agreements. These measures significantly reduced health care providers' revenue from compulsory health insurance, which had an impact on increasing the losses of these providers, particularly hospitals ⁽³⁵⁷⁾.

Voluntary health insurance (VHI) has two main forms: complementary VHI provides insurance to cover co-payments only, and supplementary VHI provides insurance for a higher standard and a wider scope of benefits than the mandatory insurance. Since co-payments for some health services can represent high financial burden for patients, the share of population holding complementary health insurance is very high and comprises more than 95 % of those who are eligible to pay co-payments ⁽³⁵⁸⁾.

Overall levels of enrolment in complementary health insurance have not changed dramatically during the crisis ⁽³⁵⁹⁾. Total enrolment in 2014 (1,433,484) was at its highest level since 2008 (1,455,828). Since 2009, the government has started to cover co-payments for economically disadvantaged people who meet predetermined

criteria ⁽³⁶⁰⁾. To avoid cream-skimming by insurers and to equalise the variations in risk structure, a risk-equalisation scheme was introduced in 2005. Risk equalisation is retrospective, calculated on the basis of expenditures for health care services and for health care providers ⁽³⁶¹⁾. Premiums have been community rated since 2005, are similar across the insurers (i.e. premiums currently do not differ across insurers by more than €1 per month). The large premium increase (by more than 16 %) in 2014 was in response to the 2012 "Fiscal Balance Act", which shifted some costs from HIIS to complementary VHI in an effort to keep public expenditure sustainable.

Out-of-pocket payments exist as two main mechanisms: cost sharing and direct payments. Cost sharing takes the form of flat rate co-payments and applies to most types of health care services and to all patients with the exception of some vulnerable social groups (children, unemployed, those with income below a given threshold, chronically ill). However, since a large majority of patients is covered by voluntary insurance covering complementary co-payments, this form hardly exists in the form of direct payments. The latter are used, however, in case of visits to the providers who do not have a contract with the HIIS, to the specialists without a GP's referral and to private dentists. The out-of-pocket payments are also used to avoid waiting times and pay for extra services, not included in the general benefit package of the social insurance system.

Compulsory health insurance contributions constitute the major source of health care financing with 66.5% of current health expenditure (2016) ⁽³⁶²⁾. General national and municipal-level taxation represents only 3.8% of current health expenditure, and is mostly devoted to the financing of capital investments in hospitals, specialised health institutions at national and regional levels, national health programmes, medical education and research (Ministry of Health) and public health centres and public pharmacies (municipalities).

⁽³⁵⁵⁾ Health Insurance Institute of Slovenia. Web page: <http://www.zzs.si/zzs/internet/zzseng.nsf/o/87C028D74130DE0AC1256E89004A4C0C>.

⁽³⁵⁶⁾ Health Insurance Institute of Slovenia. Web page: <http://www.zzs.si/zzs/internet/zzseng.nsf/o/87C028D74130DE0AC1256E89004A4C0C>.

⁽³⁵⁷⁾ Institute of Macroeconomic Analysis and Development (2014) Development report 2014. Indicators of Slovenia's Development. Health expenditure.

⁽³⁵⁸⁾ OECD Health Statistics 2015.

⁽³⁵⁹⁾ Overall, the largest decrease in total enrolment was in 2010, when the number of VHI enrollees fell by around 12,000 people (-0.8%); there were smaller decreases in VHI enrollees of around 8,200 and 3,800 in 2009 and 2011, respectively.

⁽³⁶⁰⁾ Health Insurance Institute of Slovenia. Web page: <http://www.zzs.si/zzs/internet/zzseng.nsf/o/87C028D74130DE0AC1256E89004A4C0C>.

⁽³⁶¹⁾ Health Insurance Institute of Slovenia. Web page: <http://www.zzs.si/zzs/internet/zzseng.nsf/o/87C028D74130DE0AC1256E89004A4C0C>.

⁽³⁶²⁾ Statistical Office of the Republic of Slovenia, 2018. Health Expenditure and Sources of Funding 2016.

The share of government budget funding is one of the lowest in the EU and transitioning towards a system that is less reliant on contributions could improve the future stability of health care financing.

Contributions to fund the HIIS are mostly related to earnings from employment. The contribution rate amounts to 13.45% of gross income, out of which 6.36% is paid by the employee and 7.09% by the employer. Both together represented 97% of compulsory insurance revenues in 2016 (including all types of categories of insured persons ⁽³⁶³⁾). The other source of HIIS revenues is general taxation with only 3% ⁽³⁶⁴⁾.

Public health expenditure accounted for about 14.9% of the total general government health expenditure in 2016 ⁽³⁶⁵⁾.

Administrative organisation: levels of government, levels and types of social security settings involved, Ministries involved, other institutions

The coverage by compulsory health insurance (CHI) is universal. It covers the contributors (employees, pensioners, farmers, self-employed), their dependants (subsidised by the compulsory health insurance), but also unemployed and individuals without income (whose contributions are paid by the National Institute for Employment, central government and municipalities). The benefits package comprises a wide coverage of primary, secondary and tertiary services, pharmaceuticals, medical devices, long sick leave and travel costs. Some services are 100% covered by CHI, while others are only covered up to a certain share of the service's full value. However, the difference to the full value is usually covered by complementary health insurance.

More than 95 % of insured CHI that are liable for co-payments is included also in voluntary complementary health insurance to cover cost-sharing in the social security system.

Complementary health insurance guarantees full co-payment coverage for all services covered by compulsory health insurance. This could lead to unnecessary care ⁽³⁶⁶⁾. Introducing a fee for some health services, which could not be covered and reimbursed by complementary insurance, would represent a supplementary tool for cost control for the public health care fund. There is also room to continue to rationalise the public benefit basket by reducing the reimbursement rate or delisting certain less medically necessary services, such as spa treatments, non-emergency ambulance transportation or less clinically-effective medicines ⁽³⁶⁷⁾.

Private sources account for 27.1% of total health expenditure in 2015 and exceed the EU level (21.6% weighted average, 23.6% unweighted average). Private sources consist of two main sources of financing: out-of-pocket payments, representing 12.5% and voluntary health insurance accounting for 14.5% in 2015. Total private expenditure has been increasing over the recent years: its average real yearly growth per capita over the period 2005-2015 has amounted to 2.1% (OECD average: 1.6 %) ⁽³⁶⁸⁾. Out-of-pocket expenditure accounted for 12.5% of total current health expenditure in 2015, compared with 15.9% in the EU-28 (unweighted average 21.8%) ⁽³⁶⁹⁾. During the crisis, a significant share of the shortfall in public funding was compensated for by complementary health insurance schemes, so that out-of-pocket expenditure increased only marginally, however, voluntary health expenditure increased considerably more than out-of-pocket expenditure. Had this not been the case, they would have been significantly affected by lower availability and higher out-of-pocket payments as public funding declined ⁽³⁷⁰⁾.

Slovenian households allocate the largest shares of out-of-pocket expenditure to medical goods (2015: 40%; of which 36% for over-the-counter medicines), therapeutic appliances (20%; of which 16% for glasses), various other health services (physiotherapy) and alternative medicine (11%),

⁽³⁶³⁾ Self-employed, pensioners, farmers, self-payers and other categories.

⁽³⁶⁴⁾ OECD Health at a glance 2017. Sources of health care financing. Page 139.

⁽³⁶⁵⁾ Eurostat Database 2018 (General Government Expenditure by COFOG).

⁽³⁶⁶⁾ OECD (2013). 2013 Economic Survey – Slovenia.

⁽³⁶⁷⁾ OECD (2013). 2013 Economic Survey – Slovenia.

⁽³⁶⁸⁾ OECD Stat 2018.

⁽³⁶⁹⁾ Source Eurostat Database.

⁽³⁷⁰⁾ Institute of Macroeconomic Analysis and Development (2014) Development report 2014. Indicators of Slovenia's Development. Health expenditure.

dental care (8%) and specialist outpatient care (8%). In 2009–2013, increases in out-of-pocket expenditure were recorded by medical goods, long-term institutional care and patient transport), while significant decreases in out-of-pocket expenditure were recorded by dental care, specialist outpatient care, and various other health services (physiotherapy, alternative medicine) ⁽³⁷¹⁾.

Slovenian households allocate the largest shares of out-of-pocket expenditure to medical goods (2015: 35%; of which 32% for over the counter medicines, therapeutic appliances (21%; of which the most for glasses), various other health services (physiotherapy) and alternative medicine (around 10 %), dental care (8%) and specialist outpatient care (8%) ⁽³⁷²⁾.

Types of providers, referral systems and patient choice

Public primary health care is provided by a mix of public and private providers with concessions. Public providers include health care centres and health stations, institutions established and owned by local communities. Private providers are individual health care professionals working individually or in group practices offering various combinations of services and specialties.

The patients can choose the primary care provider among those who have a contract with the HIIS and have the right to change them after a year. The personal physician plays the role of the gatekeeper since his referral is necessary to proceed to specialist and hospital care. The referral is not required only in case of chronic diseases or long-term treatment when many consecutive contacts with a specialist are necessary. Moreover, patients can select a private physician of their choice, but must cover all costs out-of-pocket.

Specialist outpatient care is provided in hospitals or private health facilities, while ambulatory services are provided in the polyclinics affiliated with hospitals, in community health centres or in private specialists' offices.

⁽³⁷¹⁾ OECD Stat 2015.

⁽³³⁾ OECD Stat 2018 (Based on data by the System of Health Accounts).

⁽³⁷²⁾ OECD Stat 2018 (Based on data by the System of Health Accounts).

Specialists can also work part time in private and public health centres, based on civil law contracts. There exist also some private polyclinics, which may or may not have contracts with HIIS and, based on whether or not they hold a contract, paid either in the form of social insurance reimbursement, or as out-of-pocket payments.

Although the number of physicians has been growing more strongly in recent years, Slovenia's gap with the EU remains significant. In the last decade, the number of practising physicians per 100,000 population has been slowly growing from 225 in 2003 to 283 in 2015 (EU average in 2015 was 344) ⁽³⁷³⁾. In the 2005–2016 period, the number of practicing physicians in Slovenia grew on average annually by 2.3%, which was faster than in the EU28 average (1.5 %) ⁽³⁷⁴⁾.

Slovenia lags the most regarding the number of general practitioners. Following the adoption of measures ⁽³⁷⁵⁾ to strengthen primary health care, in recent years the number of general practitioners has increased reaching 55 per 100 000 inhabitants in 2015, still significantly lower than the EU average (2015: 78) ⁽³⁷⁶⁾. This suggests under provision and problems with access to the primary health care, especially in light of the gatekeeper function exercised by the latter. One of the indicators showing the capacity of the primary level to assume a greater workload is the ratio of general practitioners to specialists. On this indicator too Slovenia lags behind the EU average: the proportion of general practitioners in the total number of physicians stands at 19%, compared with 23% in the EU. In Slovenia, at the primary level, besides general practitioners, there are also paediatricians and gynaecologists who have their own patients.

⁽³⁷³⁾ According to national sources, the figure for 2016 is 307 physicians per 100,000 population. https://podatki.nijz.si/Selection.aspx?px_path=NIJZ%20podatkovni%20portal_5%20Viri%20v%20zdravstvu_1%20Izvajalci%20zdravstvene%20dejavnosti&px_tableid=BPI_kazalniki.px&px_language=sl&px_db=NIJZ%20podatkovni%20portal&rxid=f346f106-811d-4b01-89dc-800bcecede2e.

⁽³⁷⁴⁾ Eurostat Database, 2018. Own calculation for EU28 average (unweighted).

⁽³⁷⁵⁾ The introduction of so-called family medicine model practices where registered nurses assume greater responsibilities; and additional funding for the primary level of health care (Ministry of Health, 2012).

⁽³⁷⁶⁾ Eurostat.

The number of nurses, however, is in line with the EU averages (827 per 100 000 in Slovenia vs. 837 in the EU). Therefore, Slovenia has adequate opportunities to introduce changes in the responsibilities of nurses in view of the fact that the number of qualified nurses has been growing in recent years ⁽³⁷⁷⁾ as well as in view of the high ratio of practicing physicians to nurses. The large inflow of nurses to the labour market will have to be regulated by additional systemic measures in both health care (a further transfer of certain duties from doctors to registered nurses) and long-term care (faster development of community nursing care) ⁽³⁷⁸⁾.

Due to a lack of providers or long waiting times for some specialised services and surgeries, access to some health care services remains limited. Specific incentives could be developed to promote and encourage staff to work in some specialties currently in shortage. An increase in the supply of primary-care doctors would allow more extensive gatekeeping and cost-effective prevention in the medium term, though this strategy could boost spending in the short term. Nevertheless, and more generally, the human resources strategy needs to tackle staff and population ageing in the future.

To tackle the shortage of doctors at primary level, particularly in demographic areas with an ageing population, an analytical document ⁽³⁷⁹⁾ was prepared in 2013, with the objective to reach a proportion of 1.500 patients to one doctor at primary care level over the following 5 years.

To achieve this objective, it was estimated that 1,364 GPs would be required at national level, which required additional 318 GPs in each of the following five years.

Since 2013 the number of places available for general practitioners specialisations was increased so that 66% of available specialisations were allocated to general practitioners. The number of available specialisation for general practitioners

⁽³⁷⁷⁾ In 2008–2012, on average 445 nurses graduated every year, 12% more than on average in the period 2003–2008.

⁽³⁷⁸⁾ Institute of Macroeconomic Analysis and Development (2014) Development report 2014. Indicators of Slovenia's Development. Health Care Resources.

⁽³⁷⁹⁾ "Public network of primary health care in the Republic of Slovenia in the field of general practitioners and paediatricians at the primary level", (2013).

also increased consistently between 2014 and 2018, but many posts were left unfilled due to the low attractiveness of this specialisation.

By reducing the proportion of patients to GPs, this is expected to improve not only the quality and safety of patient care, but also to reduce the cost of patient care, due to the gatekeeping function of primary care.

It is also acknowledged that the existing primary healthcare system needs to be upgraded in order to be able to cope with future challenges. In this view, almost all family practices (a few are left to join in 2018) have evolved into "family medicine model practices". Family medicine model practice is a medical practice, where a family medicine team, in addition to a junior nurse, is supported by a graduate nurse (registered nurse) with additional knowledge, which ensures the transfer of competencies from a doctor to a graduate nurse who treats and manages chronic patients. This is a strengthening of family medicine teams and an improvement in basic public health services, which is a priority policy area. It is expected to result in the improved management of patients with chronic diseases, since part of their care should be taken over by a graduate nurse. A graduate nurse should also cope with some other tasks to be carried out in family practice outpatient clinics, in particular in the area of preventive care and health care in outpatient clinics of the registered population.

In 2018, there were 30 hospitals in Slovenia, and a large majority of them were state owned. Although legal provisions allow for establishment of new private hospitals, privatisation remained limited and there have not been significant private investments in health infrastructure.

The capacity of acute care hospital beds (422 beds per 100 000 inhabitants in 2015) ⁽³⁸⁰⁾, average length of stay (6.8 days) and the number of inpatient discharges (18 per 100 000 inhabitants) are similar to the average figures for the EU (respectively 402 beds, 7.6 days and 16 discharges per 10000 inhabitants) and suggest an efficient utilisation of hospital care. However, the number of hospital beds in acute care could be further lowered, as low occupancy and turnover rates point to excess capacity. In a number of countries

⁽³⁸⁰⁾ EUROSTAT and OECD.

the decline in the number of acute care hospital beds accelerated in 2010–2011 because of the economic crisis and austerity measures in public health care; at first there was no such response to the crisis in Slovenia. Nevertheless, the number of acute care beds declined in 2012, which is probably related to the rationalisation of operations in hospitals. The data about the proportion of surgical procedures conducted as day cases is low compared to EU average (9.7% vs. 32.3% in 2015) and, despite recent progress in increasing the share of surgeries carried out as day cases, more could be done to further develop ambulatory care ⁽³⁸¹⁾. This suggests that a strategy to increase day case interventions should be then encouraged also to reduce waiting times for surgery.

With regard to the transfer of health care services from hospital inpatient care to ambulatory outpatient care or day care, data have been improving from year to year. According to data for 2016, the proportion of cataract surgeries carried out as day cases was 97.8%, above the EU average of 84.2%. However, the share of inguinal hernia repair and of tonsillectomy performed as day cases are still largely below the average ⁽³⁸²⁾. Slovenia is also considering the introduction of more systematic monitoring and making necessary changes to the model of payment of providers of specialist services at the secondary and tertiary levels.

Pricing, purchasing and contracting of healthcare services and remuneration mechanisms

Within each annual financial plan the HIIS defines a maximum overall amount to be spent on health services in the upcoming year. This annual budget is defined in cooperation with the Ministry of Health and the Ministry of Finance, taking into consideration the macroeconomic situation which affects the expected revenues of the system. The national health budget is determined at the national level, with no further geographical disaggregation (local tax revenue is managed separately by local authorities according to their own criteria).

The first stage consists of partnership negotiations with different groups of health care providers and

other stakeholders over the volume of services to be provided and reimbursed by the HIIS. The second stage involves the individual providers in the negotiations with the HIIS on the type and volume of services that will be provided, the tariffs for these programmes and services, methods of payment, quality requirements, the supervision of the implementation of the contract and the individual rights and responsibilities of the contracting parties. The reimbursements are capped, thus the services provided in excess of the contracted amounts – however, with some exceptions - are not paid for. The same applies to the services which have been contracted but actually not provided.

Voluntary complementary health insurance is provided by one mutual insurance company obliged by law to provide VHI for co-payments and two profit-oriented private insurance companies.

Public expenditure on health administration and health insurance as a percentage of GDP (0.1%) and as a percentage of current health expenditure (2.3%) was slightly below the EU average in 2015 (respectively 0.3% and 3.4%). Over the last decade, major efforts have been done to reduce administrative costs and improve the general management of the sector and, given the system's organisation and regulation, it is important that they be paired with measures to improve quality monitoring.

Payment mechanisms and levels are regulated based on annual contractual arrangements between the HIIS and health care providers as explained before. Each programme has an annual budget at the national level, which is then translated into caps in budgets for individual providers.

Primary care providers are paid through a combined system of capitation and fee-for-service payments. The reimbursable volume of services is outlined in prospectively determined annual contracts. Half of the value of these services is paid per capita for the patients registered with the physician, while the other half is paid on the basis of fee-for-service, according to the number of services provided.

Outpatient specialist care is remunerated on the basis of fee-for-service, according to an HIIS

⁽³⁸¹⁾ OECD (2013). 2013 Economic Survey – Slovenia.

⁽³⁸²⁾ EU26. Figures were taken from Health at a Glance (2018).

classification of services, whereas the volume of services provided is outlined in the contracts. In order to promote preventive services and reduce specialists' referrals, one of the eligibility criteria for HIIS payments is the implementation by the providers of prospectively determined volumes of preventive services.

Different payment mechanisms are valid for certain types of services: for non-acute inpatient care reimbursement is based on prospectively determined number of bed days, for psychiatric care and rehabilitation programme on prospectively determined number of cases, dental services on the fee-for service model.

Since 2003 hospital care has been reimbursed according to a Diagnosis-Related Group (DRG) model. This replaced the per-case payment system, which consisted in payments for complete inpatient episodes and, as such, did not account for the differences in severity of cases. It provided a perverse incentive to increase the number of single inpatient admissions. The DRG model is based on a classification of 653 diagnosis-related groups, which are defined by the clinical diagnosis, procedures undertaken and length of treatment. Payment is based on the volume and value of programmes determined prospectively in the contract. The annual volume of a health care programme reimbursable by the HIIS is limited by the budget, and defined on the basis of the respective programme executed during the previous year, adjusted by the additional annual programmes aiming at improving access to health services and the efficiency of providers. The cost weight used to calculate the value of case-mix is calculated as the relative price of each DRG in comparison to the average DRG price at national level. Since 2005, two procedures, dialysis services and transplantation programme, have been excluded from the prospective DRG model and reimbursed retrospectively on the fee-for-service and per-case basis respectively. In 2013, a new version of the Australian DRG model (v6.0) was imported, but only used for the classification of patients.

The hospitals' employees are salaried under general rules, with some specialists having a special health care contract.

The market for pharmaceutical products

In 2015 pharmaceutical spending accounted for 0.8% of GDP and 12.7% of public health care expenditure, close to the average figures for the EU (1 % and 12.7% respectively).

Slovenia introduced an external price referencing mechanism for setting maximum prices. The mechanism takes into account the prices of medicinal products in Germany, Austria and France. If due to the size and other characteristics of the Slovenian market, the maximum allowed price does not enable the marketing authorisation holders to supply the market, a higher maximum price can be set as an exception. Internal reference pricing uses the national system of reference prices for mutually interchangeable pharmaceuticals. The system is based on generic substitution of products officially recognised as mutually interchangeable (based on their therapeutic similarity) and listed in a national list of substitutable pharmaceuticals. The lowest drug price in the same group will be used as reference price. Medicinal products financing from public revenues is regulated by the Health Care and Health Insurance Act and falls within the competence of the Health Insurance Institute of Slovenia. Slovenia also has a system defining therapeutic clusters, i.e. groups of pharmaceuticals that have the same therapeutic indication, for which health insurance covers those medicinal products that are comparable in efficacy, safety and cost-effectiveness.

Members of a special committee, formed of experts from various health care fields, decide the levels of reimbursement based on cost-benefit analyses and available financial resources. A positive list details pharmaceuticals that are reimbursable (70% reimbursed by the compulsory insurance and the rest either by complementary insurance either by out-of-pocket payments).

Each physician has a prescribing number in order to control the volume and the type of pharmaceuticals prescribed. Appropriate penalties can be issued by the HIIS to contracted physicians in case of irregularities.

Over the past decade, structural measures were adopted to rationalise expenditure on pharmaceutical products, currently standing at 18.4% as a share of total health expenditure, down

from 21.8% in 2005. Lowering costs through the aforementioned measures – particularly for generics and innovative medical products (with expired patent protection) – facilitated the financing of new innovative medicinal products for which there is no alternative on the market. In order to ensure the entry of new innovative medicinal products on the market, additional systemic measures are being introduced, such as joint public contracts for the purchase of medicinal products in hospitals ⁽³⁸³⁾.

Use of Health Technology Assessments and cost-benefit analysis

Health technology assessment (HTA) is performed at a very basic level. An important step forward has been the launch of a programme for the standardisation of equipment and the introduction of technical guidelines. In 2005, a standard procedure for assessing and implementing new or adapted health care programmes and other new methods of work among the programs of health care was introduced. It was revised then in 2009. In 2010 the Ministry of Health started with activities to set up an HTA network for the organised and systematic assessment of health care technologies (old and new) for all submitted health technologies proposals.

Health technology assessment (HTA), would clearly also be an asset in terms of efficient allocation of resources and could help determine which (new) benefits should be covered by the HIIS. Certain HTA mechanisms are used during regular assessments within the Agency for Medicinal Products and Medical Devices of the Republic of Slovenia, Health Insurance Institute of Slovenia and Health Council, but the NHP does envisage their wider use and the draft government Act on Health Care Quality and Safety envisages the creation of an HTA agency.

E-health and health-system information and reporting mechanisms

The national eHealth project includes different electronic solutions with a strategic goal to increase the quality and efficiency of the health system, including better planning and management

⁽³⁸³⁾ The Ministry of Health (2014).

of health care organisations and the health system as a whole.

A significant progress in the field of eHealth was made in 2015 and national implementation is continuing in the last years. All hospitals, healthcare centres and pharmacies are connected to the healthcare network that enables secure and reliable communication between them.

The central register of patient data (a solution that enables exchange and shared use of medical documents) currently enables access to over 11 million documents for over 1,69 million patients and thus enables health professionals to save time and make medical decisions based on accurate data (form discharge letters, ambulatory results and patient summaries).

ePrescription was launched nationally in November 2015. More than 92% of prescriptions are already prescribed electronically. The main advantage of the system is a possibility for doctors and pharmacists to check interactions and contraindications of the prescribed medicines.

The national implementation of a central information system for collecting data from all waiting lists was launched at the end of 2015, all healthcare providers are regularly sending data about all patients waiting for the medical service. Enabling eBooking of medical services is already mandatory for all healthcare providers on a secondary and tertiary level. eReferral became obligatory in beginning of 2017 and over 90% of referrals are already written electronically.

A patient portal that enables a patient to see his/her own medical data in eHealth databases, gives or takes consent to medical professionals was published and put in use in 2017.

A "telestroke solution" (i.e. a system that enables a remote consultation and examination of the patient with a suspected brain stroke through a video conference system) is in full use.

Some other, minor solutions that provide valuable data are also in full use (collecting quality indicators of medical care from all family medicine 'model' practices is in place from the beginning of 2015, a portal for safe exchange of radiology picture material is enabled and in use, an

application for doctors for terminologies is in place).

Health promotion and disease prevention policies

Health promotion and disease prevention is mainly done through State's and HIIS's large scale programmes. Non-governmental organisations play a prominent role in the area of health promotion and disease prevention. Since 2017 there has been a significant increase of NGO funding.

The Slovenian government has launched a number of policies and strategies such as the National Programme on Nutrition and Health Enhancing Physical Activity 2015–25 and the National Cancer Control Programme 2017-2021 to curb the rise in overweight, obesity and hypertension and to reduce incidence of cancer. Beyond the implementation of several EU Directives, new legislation on tobacco control adopted in 2017 includes a ban on all tobacco-and-related-products advertising, promotion and sponsorship, including a display ban (mandatory from march 2018) on tobacco and related products at the points of sale It also includes the implementation of licencing for retailers of tobacco and related products and ban on selling to minors and using e-cigarettes and other tobacco related products in closed public places and workplaces, The new Act also made plain packing mandatory as of 2020 and banned smoking in all vehicles in the presence of minors.

The most recent health promotion campaigns included ⁽³⁸⁴⁾: tackling regional health inequalities, HIV/AIDS prevention, anti-smoking and alcohol policy, food and nutrition, enhancing physical activity, improving mental health and reducing all forms of addiction or dependency. Vaccination rates for diphtheria, tetanus pertussis are high (95%) ⁽³⁸⁵⁾.

Slovenia has in place three national based population cancer screening programmes (cervical cancer, breast and colorectal cancer). The proportion of screening rates for cervical cancer is

quite high (72.1% of the target population in 2015 ⁽³⁸⁶⁾). The same applies to breast cancer screening.

Slovenia has traditionally had a strong network of primary health providers, with health promotion and disease prevention programs being an integral part of service delivery at the primary level. Cardiovascular disease prevention programmes with lifestyle interventions against key risk factors for non-communicable diseases (tobacco use, obesity, high blood pressure, diabetes) have been in place since 2002. From 2011 a system of family medicine model practices has been introduced to strengthen prevention work and to navigate chronic patients through health system.

In 2015, public expenditure on prevention and public health services as a % of GDP (0.2%) and as a percentage of total current health expenditure (2%) was below the EU average for the same year (0.3% and 3.2% respectively).

Recently legislated and/or planned policy reforms

Improving health care and maintaining its fiscal and financial sustainability are high on the political agenda. Work is ongoing towards the implementation of a reform of the healthcare sector. The economic crisis, rising unemployment, insufficient financial resources and ageing population were main triggers for reforming the health care system. In June 2013 the Ministry of Health opened a public debate on the new legislation proposal on health care.

The combination of compulsory and complementary health insurance, which are the main financial sources for financing health care, is insufficient and not in line with guidelines of social welfare policy. Importantly, the current system is based on sources of financing (contributions) that are subject to cyclical fluctuations, and do not guarantee sustainable financing in the future. Work was put into providing financial projections and scenarios of abolishing complementary health insurance and introducing other/alternative ways of solidarity-based financing schemes.

⁽³⁸⁴⁾ National Institute of Public Health and Ministry of Health.

⁽³⁸⁵⁾ OECD. health at glance 2015.

⁽³⁸⁶⁾ Oi Ljubljana, 2015.

One envisaged reform is the broadening of contribution rates to certain new types of revenues with the aim of equalising the financial burden and diminishing large differences in contribution rates among specific groups of insured persons or better balancing the burden on the insured based on the widest possible social consensus. Some steps in this direction were done in 2013 with the adoption of the amendments to the "Health Care and Health Insurance Act". Contribution rates of some groups of the population (self-employed, farmers etc.) were raised, so that partial broadening of contribution bases was introduced.

The findings from the analysis of the health care system undertaken in cooperation with the World Health Organisation and the European Observatory on Health Systems and Policies offered support in the reform process. On the basis of the analysis, the "National Health Care Resolution Plan 2016-2025" was approved by the previous government in December 2015 and was adopted by Parliament in March 2016. In this document ⁽³⁸⁷⁾, the Ministry of Health committed to ensuring an effective planning of human resources in health care, covering the current needs of the population as well as accounting for the changing demographic structure. As a first step, amendments to the Medical Services Act were adopted in July 2017, providing a legal basis for to the Ministry of Health to plan and forecast future needs for different specialisations of physicians in areas of employment that are currently less attractive.

A public discussion on a proposal of the new "Health Care and Health Insurance Act" was concluded in the first quarter of 2017, but the new Health Care and Health Insurance Act with measures for counter-cyclical actions and a more stable financing of the healthcare system was never adopted. In addition, amendments to the Medical Practitioners Act were adopted, where financing of salaries and other costs for internship and specialisation is transferred from HIIS to the general budget.

In September 2017 legislation ⁽³⁸⁸⁾ was adopted with the aim to gain additional budgetary funds for

⁽³⁸⁷⁾ The Resolution on National Health Care Plan 2016-2025": Together for a society of health".

⁽³⁸⁸⁾ The Act Determining Intervention Measures to Ensure the Financial Stability of Public Healthcare Institutions Established by the Republic of Slovenia.

public hospitals. Fifteen public hospitals received €135.7 million from budgetary funds to cover accumulated losses and to pay overdue obligations to suppliers. At the same time these are undergoing a process of rationalisation based on individual recovery plans that should be completed by 2021.

In the area of waiting times changes were enforced amending existing legislation ⁽³⁸⁹⁾. With the implementation of the eBooking of medical services a uniform base has been established to manage waiting lists. The purpose of the amendments was to ensure transparency and better management of waiting lists and to regulate a comprehensive supervision of the provision of patients' and obligations.

In addition, the Ministry of Health has launched and/ or designed a number of proposed measures, also in line with the "National Health Care Plan" with a focus on health promotion and disease prevention. The national programme on nutrition and physical activity was adopted in July 2015 and implementation is in progress, in 2017 the comprehensive Action plan has been adopted. In the same direction is the adoption of the "Dementia Strategy". The aim of the strategy is to ensure preventive measures, early diagnosis and appropriate standard of health and social protection and medical care for people with dementia. In 2017 the Government adopted two important documents. First, comprehensive Cancer control plan 2017-2021 with aim to tackle increasing prevalence of cancer diseases and second, National HIV/AIDS strategy until 2025.

The new Pharmacy Practice Act adopted on 15 December 2016 entered into force on 27 January 2017. It introduces new services in order to increase patient safety regarding prescribed therapy, reduce side effects and additional hospitalisation and reduce costs, namely clinical pharmacy and seamless care in hospitals and pharmaceutical care at the primary level. The Act also restricts vertical integration in both directions: producer - wholesaler - pharmacy and vice versa to assure the professional independence of

⁽³⁸⁹⁾ The Act Amending the Patient Rights Act and Rules on the management of waiting lists and waiting times the maximum permissible for individual health services <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO7379>.

pharmacists. The guiding principle remains public health protection and care for health of individuals.

Further proposals concern pharmacies and their regulation. The proposed legislation aims at ensuring better regulation of pharmacies and the cost-effectiveness of the system. On the hospital level, seamless care and clinical pharmacy are envisaged to optimise the prescription of medicines and to achieve better compliance and safety for patients.

In July 2017, the Ministry of Health designated the coordination and working group for preparing the National cost analysis of the activities, performed by the hospitals. The purpose of the national cost analysis was to eliminate the shortcomings of the Diagnosis-related group – DRG) system-financed acute hospital treatment evaluations, specialist ambulatory service activities and at a later stage presumably other activities, performed by the hospitals.

Amendments to Health Services Act were adopted in the Parliament ⁽³⁹⁰⁾. They deal with criteria for granting concessions for public healthcare services, aiming at improving transparency and accessibility of healthcare services. The amended Act defines the nature of the public healthcare service, defines legally recognised providers (i.e. public institutions and concessionaires) and states that it is carried out under a non-profit regime. Furthermore, the Act includes a comprehensive regulation of the conditions under which health activities can be carried as well a comprehensive regulation of various forms of supervision over providers of healthcare services.

The priorities of the current government focus on efficient management of hospitals and waiting times.

Challenges

The Slovenian health care system has recently undergone a comprehensive review highlighting critical areas of improvement that should shape planned reforms in the sector. Though a set of efficiency-oriented measures was adopted, Slovenia has not yet solved the main challenges of

the system in terms of fiscal sustainability and stable financing. The main challenges for the health system appear as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated care as well as focussing on costs in view of the increasing health care expenditure, which is a challenge to the fiscal sustainability over the coming decades (for instance furthering the efforts in the area of prevention and rationalising hospital care). To this end, to promote public procurement as a means to rationalise expenditure.
- To improve the basis for more sustainable and efficient financing of health care in the future (e.g. considering additional sources of general budget funds), aiming at a better balance between resources and spending, as well as the number of contributors and the number of beneficiaries. This implies tackling the lack of sufficient in-built automatic stabilisers, especially in view of the need to re-consider the role of complementary health insurance as a driver of excess demand and avoidable costs.
- To tackle the excessive use of specialist and hospital care by strengthening the role of the primary care sector and family doctors as gatekeepers and the coordination and integration of care among different health care levels, while ensuring adequate coverage both in urban and in rural areas. To this end to enhance processes and procedures along patients' care pathways. To promote the use of quality indicators and patient oriented measures for health care procedures.
- To further the efforts to contain long waiting lists for some health care services by a more efficient allocation of human and capital resources between sectors and specialisations through active purchasing of services by public health insurance institute and by promoting day cases for surgical procedures. To this end, promote the use of ICT in the gathering, storage, use and exchange of health information.
- To foster the process of modernisation, specialisation and competition among

⁽³⁹⁰⁾ <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina?urlurid=20173026>.

hospitals, for example by allowing for selective contracting of hospitals by health insurance funds, and extending legal possibilities for quality-based financing of hospital care services. To improve reimbursement mechanisms that create incentives to increase efficiency, including improving the current DRG system to better reflect actual costs. To this end, consider whether remuneration mechanisms of hospital staff and management could be better linked to performance.

- To gradually increase the use of cost-effectiveness information in determining the basket of goods (by using HTA) and the extent of cost-sharing.

Table 2.25.1: Statistical Annex – Slovenia

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	29	32	35	38	36	36	37	36	36	38	39	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	23.2	23.7	24.3	23.9	20.7	21.2	21.5	21.5	21.2	21.9	22.6	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	3.8	5.3	6.4	3.1	-8.7	0.9	0.5	-2.9	-1.3	2.9	2.2	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	6.0	4.5	3.8	0.9	-2.5	0.7	0.3	-0.2	2.2	-1.9	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.3	8.4	8.3	8.3	9.2	8.9	8.9	9.2	9.3	9.2	8.9	10.2	10.1	10.1	10.2
Total current as % of GDP	8.0	8.1	7.9	8.0	7.8	7.5	7.8	8.6	8.6	8.5	8.5	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.4	0.3	0.3	0.3	1.4	1.4	1.0	0.6	0.7	0.8	0.4	0.9	0.6	0.2	0.3
Total per capita PPS	1,466	1,588	1,731	1,881	1,961	1,886	1,920	1,935	1,962	2,021	2,002	2,745	2,895	2,975	3,305
Public total as % of GDP	6.1	6.0	5.6	6.1	6.7	6.6	6.5	6.7	6.5	6.3	6.5	8.0	7.8	7.8	8.0
Public current as % of GDP	5.8	5.7	5.3	5.8	6.3	6.3	6.3	6.3	6.2	6.0	6.1	7.7	7.6	7.6	7.8
Public total per capita PPS	1,067	1,130	1,184	1,372	1,426	1,406	1,412	1,403	1,375	1,379	1,460	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.26	0.32	0.33	0.29	0.41	0.35	0.29	0.40	0.29	0.28	0.38	0.2	0.2	0.2	0.2
Public as % total expenditure on health	72.8	71.2	68.4	72.9	72.7	74.6	73.5	72.5	70.1	68.2	72.9	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.7	14.6	15.5	14.8	14.4	14.2	13.8	14.0	11.0	12.8	13.7	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	99.0	99.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	13.2	12.5	13.8	12.8	12.7	12.7	12.2	11.9	12.6	13.0	12.5	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status												2009	2011	2013	2015
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Population, current (millions)	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	502.1	503.0	505.2	508.5
Life expectancy at birth for females	80.9	82.0	82.0	82.6	82.7	83.1	83.3	83.3	83.6	84.1	83.9	82.6	83.1	83.3	83.3
Life expectancy at birth for males	73.9	74.5	74.6	75.5	75.9	76.4	76.8	77.1	77.2	78.2	77.8	76.6	77.3	77.7	77.9
Healthy life years at birth females	60.1	61.0	62.3	60.9	61.5	64.6	63.8	65.6	65.5	69.6	67.7	62.0	62.1	61.5	63.3
Healthy life years at birth males	56.4	57.7	58.7	59.4	60.6	63.4	64.0	66.5	67.6	67.8	68.5	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	76	68	73	77	82	73	137	134	130	123	128	64	138	131	127
Infant mortality rate per 1 000 live births	4.1	3.4	2.8	2.4	2.4	2.5	2.9	1.6	2.9	1.8	1.6	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP												2009	2011	2013	2015
Inpatient curative and rehabilitative care	2.3	2.2	2.1	2.3	2.6	2.6	2.6	2.5	2.5	2.4	2.3	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.7	1.7	1.5	1.5	1.7	1.8	1.7	1.8	1.8	1.6	1.6	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4
Prevention and public health services	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP												2009	2011	2013	2015
Inpatient curative and rehabilitative care	2.0	1.9	1.8	2.1	2.3	2.3	2.3	2.2	2.2	2.1	2.0	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.3	1.3	1.2	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.7	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.1	1.0	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3
Health administration and health insurance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.3

(1) All the figures under EU-latest national data are computed as weighted averages.

Source: EUROSTAT, OECD and WHO.

Table 2.25.2: Statistical Annex - continued - Slovenia

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU-latest national data							
	2009	2011	2013	2015															
Inpatient curative and rehabilitative care	28.4%	26.6%	26.0%	29.0%	32.8%	34.4%	33.3%	29.0%	29.0%	28.2%	27.5%	29.1%	27.9%	27.1%	27.0%				
Day cases curative and rehabilitative care	2.4%	2.2%	2.2%	2.5%	2.7%	2.8%	2.6%	2.4%	2.1%	1.9%	2.2%	1.7%	1.7%	3.0%	3.1%				
Out-patient curative and rehabilitative care	25.5%	25.2%	24.9%	25.2%	26.5%	27.5%	26.2%	24.4%	25.0%	25.9%	27.8%	26.8%	26.3%	23.7%	24.0%				
Pharmaceuticals and other medical non-durables	21.8%	20.9%	19.4%	19.3%	22.2%	23.4%	21.9%	20.6%	20.8%	18.6%	18.4%	13.1%	12.8%	14.7%	14.6%				
Therapeutic appliances and other medical durables	2.8%	2.6%	2.8%	3.1%	3.8%	4.1%	3.9%	3.4%	3.4%	4.1%	4.1%	3.6%	3.6%	4.1%	4.1%				
Prevention and public health services	3.8%	3.7%	3.7%	3.8%	4.1%	4.4%	4.3%	3.9%	3.9%	3.1%	2.6%	2.8%	2.5%	3.0%	3.1%				
Health administration and health insurance	3.6%	4.3%	4.8%	4.3%	4.9%	4.0%	3.8%	3.8%	4.0%	4.1%	3.5%	4.5%	4.3%	3.9%	3.8%				
Composition of public as % of public current health expenditure																			
Inpatient curative and rehabilitative care	34.9%	33.9%	34.2%	35.5%	36.4%	36.5%	37.1%	34.9%	34.7%	34.4%	33.1%	33.9%	33.6%	32.1%	31.9%				
Day cases curative and rehabilitative care	3.2%	2.9%	3.1%	3.3%	3.2%	3.1%	3.1%	3.0%	2.8%	2.3%	2.8%	1.9%	2.0%	3.4%	3.5%				
Out-patient curative and rehabilitative care	21.6%	23.3%	22.9%	22.9%	22.2%	22.2%	22.7%	22.2%	23.4%	25.4%	27.8%	22.9%	23.5%	22.2%	22.5%				
Pharmaceuticals and other medical non-durables	18.2%	18.4%	17.3%	15.9%	15.9%	15.6%	15.4%	14.0%	13.9%	12.6%	12.7%	11.8%	11.9%	12.6%	12.7%				
Therapeutic appliances and other medical durables	0.7%	0.7%	0.8%	0.7%	0.6%	0.8%	0.8%	1.0%	0.9%	1.7%	1.8%	1.8%	1.9%	2.0%	2.1%				
Prevention and public health services	3.8%	3.9%	3.9%	3.8%	4.0%	4.0%	4.0%	3.9%	3.7%	2.7%	2.0%	2.9%	2.5%	3.2%	3.2%				
Health administration and health insurance	3.1%	3.0%	3.2%	2.8%	2.9%	2.9%	2.6%	2.6%	2.6%	2.8%	2.3%	4.1%	4.0%	3.6%	3.4%				
Expenditure drivers (technology, life style)																			
MRI units per 100 000 inhabitants	:	0.55	0.60	0.69	0.69	0.73	0.83	0.87	0.87	0.87	0.87	1.0	1.4	1.5	1.9				
Angiography units per 100 000 inhabitants	0.5	0.5	0.5	0.5	0.6	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0				
CTS per 100 000 inhabitants	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.2	1.3	1.3	2.1	1.9	2.1	2.3				
PET scanners per 100 000 inhabitants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2				
Proportion of the population that is obese	:	:	16.4	16.8	:	:	:	:	:	18.6	:	15.0	15.1	15.5	15.4				
Proportion of the population that is a regular smoker	23.0	18.5	18.9	18.7	:	:	:	:	:	18.9	:	23.2	22.3	21.8	20.9				
Alcohol consumption litres per capita	11.1	12.3	11.0	10.9	10.5	10.3	10.6	11.0	9.5	10.5	:	10.4	10.3	10.1	10.2				
Providers																			
Practising physicians per 100 000 inhabitants	235	236	239	240	241	243	249	254	263	277	283	324	330	338	344				
Practising nurses per 100 000 inhabitants	748	760	775	788	803	819	833	816	832	856	878	837	835	825	833				
General practitioners per 100 000 inhabitants	38	38	41	41	42	44	45	47	50	52	55	77	78	78	78				
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402				
Outputs																			
Doctors consultations per capita	:	6.6	6.7	6.7	6.6	6.4	6.5	6.3	6.5	6.6	6.8	6.2	6.2	6.2	6.3				
Hospital inpatient discharges per 100 inhabitants	15	16	16	16	17	16	17	:	:	18	18	17	16	16	16				
Day cases discharges per 100 000 inhabitants	2,026	2,142	2,243	2,484	2,566	2,229	1,950	:	:	2,047	1,888	6,362	6,584	7,143	7,635				
Acute care bed occupancy rates	70.0	72.0	69.7	71.5	71.2	69.7	68.9	68.8	67.9	68.4	68.8	77.1	76.4	76.5	76.8				
Hospital average length of stay	5.8	5.8	6.8	6.9	6.9	6.7	7.3	7.5	6.8	6.9	6.8	8.0	7.8	7.7	7.6				
Day cases as % of all hospital discharges	11.7	11.8	12.1	13.3	13.4	12.0	10.5	:	:	10.4	9.7	28.0	29.1	30.9	32.3				
Population and Expenditure projections																			
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.						
AWG reference scenario	5.6	5.8	6.1	6.3	6.5	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.7	Slovenia	EU				
AWG risk scenario	5.6	6.0	6.3	6.7	7.1	7.3	7.5	7.6	7.7	7.7	7.7	7.6	1.0	0.9					
																2.0	1.6		
Note: *Excluding expenditure on medical long-term care component.																			
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %						
Population projections until 2070 (millions)	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	Slovenia	EU					
																		-5.2	2.0

(1) All the figures under EU-latest national data are computed as weighted averages.

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.26. SPAIN

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

Spain has a population of almost 46.4 million inhabitants in 2016 (according to Eurostat projections). Over the next decades, this is expected to increase to 49.9 million by 2070. With a GDP of more than €1,080 billion, or €26.1 thousand PPS per capita in 2015 it is below the EU average GDP per capita of €29.6 thousand.

Total and public expenditure on health as % of GDP

Total expenditure ⁽³⁹¹⁾ on health as a percentage of GDP (9.3% in 2015) has increased over the last decade (from 7.9% in 2005), but is still below the EU average ⁽³⁹²⁾ of 10.1% in 2015. Public expenditure has increased though to a smaller extent: from 5.7% in 2001 to 6.6% of GDP in 2015. It is also below the EU average of 8% in 2015. Looking at health care without long-term care⁽³⁹³⁾ reveals a different picture, with public spending still below but significantly closer to the EU average (5.9% vs 6.8% in 2015).

When expressed in per capita terms, total spending on health at €2,268 PPS in Spain is below the EU average of 3,305 in 2015. So is public spending on health care: €1,617 PPS vs. an average of €2,609 PPS in 2015.

Expenditure projections and fiscal sustainability

As a consequence of population ageing, from 2016 to 2070 health care expenditure is projected to increase by 0.5 pps of GDP below the average growth expected for the EU of 0.9 pps of GDP,

⁽³⁹¹⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽³⁹²⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units and units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽³⁹³⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

according to the AWG reference scenario ⁽³⁹⁴⁾. When taking into account the impact of non-demographic drivers on future spending growth (AWG risk scenario), health care expenditure is expected to increase by 1.2 pps of GDP from now until 2070 (EU: 1.6).

Overall, for Spain no significant short-term risks of fiscal stress arise. Risks appear, on the contrary, to be high in the medium term from a debt sustainability analysis perspective due to the stock of debt still being high at the end of the projection (2028). High fiscal risks are expected in the long-run ⁽³⁹⁵⁾.

Health status

In 2015, life expectancy at birth (85.8 years for women and 80.2 years for men) and healthy life years (64.1 years for women and 63.9 years for men) are among the highest in the EU and well above the respective EU averages (83.3 and 77.9 years of life expectancy in 2015, 63.3 and 62.6 in 2015 for the healthy life years) ⁽³⁹⁶⁾. An infant mortality rate of 2.7 per thousand is lower than the EU average of 3.6%, having gradually fallen over most of the last decade (from 3.7% in 2005).

As for the lifestyle of the Spanish population, data indicates a considerable fall in the proportion of regular smokers (from 26.4% in 2006 to 23.0% in 2014), although the share is still above the EU average of 21.8%. Over the same period the proportion of the obese in the population has increased (from 14.9% in 2006 to 16.2% in 2014), while the alcohol consumption shows a very small reduction from 10.2 litres per capita in 2003 to 9.3 litres in 2013.

System characteristics

Overall description of the system

The Spanish health care system is fully devolved to the regions. Despite the decentralised character

⁽³⁹⁴⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽³⁹⁵⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽³⁹⁶⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

of the system, eligibility depends on the general regulations of the Central government. Autonomous communities (ACs, i.e.: regional governments) are in charge of the process of accreditation of coverage which is decided in each case by the Social Security authorities dependent on Central government. All of them respect the principle of universality of health care in the framework of the Spanish Constitution and State General Health Care and Social Security Laws, extending it not only to the Spanish citizens contributing financially to the system, but also to EU temporary residents and non-residents (non-EU residents, including illegal immigrants are not fully covered). There is also a Common Basket of services of the National Health System that has to be delivered to the whole population covered.

Coverage

Through the Royal Decree 16/2012, the Spanish health system was reformed to cover those who are insured as part of the system (including both Spanish and overseas citizens). This covers workers affiliated with the Social Security system, pensioners as well as recipients of social benefits. Coverage can also be provided, if requested, to non-insured Spanish, EU and EEA citizens who are legal residents in Spain whose annual income is below 100,000 euros and who are not covered by any other health insurance. Through the Royal Decree 7/2018 the cover is extended to foreigners that, while being in Spain, do not have their legal residence there. This implicitly extends cover to illegal immigrants.

Administrative organisation and revenue collection mechanism

The system is a unique combination of central, regional and local management and financing of health care. It is mostly tax-funded. Public expenditure accounts for 71.3% of total expenditure on health, out-of-pocket expenditure 24.2% and the rest is private health insurance (2015 figures).

The reform in 2001 marked the finalisation of the devolution process, which meant that all of the 17 regions were granted complete freedom to manage their own health services. Health funding was integrated within the general financing system through tax cession; and ear-marking of funds was

phased out. The new system since the 2009 reform⁽³⁹⁷⁾ follows the same structure of regions financing implemented in 2001 aimed at reinforcing the basic principles: elements of taxation ceded to regional administrations and assignments from the state's general budget. As a result of this reform, 90% of regional revenues stem from taxes.

Under the 2009 reform the financing of health services is as follows:

- Specified shares of taxes are ceded to the ACs: 50% of personal income tax and VAT and 58% of the main excise taxes (hydrocarbons, alcohol, and tobacco). The system since 2001 includes regional direct control over taxes on gifts and inheritances, properties and property transfers and gambling taxes. ACs can also raise their own taxes.
- The Fundamental Public Services Guarantee Fund guarantees that health care, education and social services are equally provided regardless the place of residence. It is made up of 75% of the taxes ceded to ACs plus state transfer. This is distributed to ACs on the basis of population, extension, dispersion, insularity (as before) plus the *equivalent protected population* (split into subgroups by age).
- The Global Sufficiency Fund guarantees that ACs have enough resources to finance all their competences. It is fully financed by the central government. Consequently, ACs can use the remaining 25% of ceded taxes plus this State fund to meet their competences.

Finally, in order to promote economic convergence and development of those ACs with lower income per capita, the system relies on two new Convergence Funds fully financed by the Spanish state's budget transfers (the Competitiveness Funds and the Cooperation Funds), over which the central administration holds more discretion.

At the central level the Ministry of Health is responsible for: general coordination and basic health legislation; definition of benefits package

⁽³⁹⁷⁾ Law 22/2009 that regulates the financing system of Autonomous Communities of common regime and Cities with Autonomic Statute.

guaranteed by the NHS; pharmaceutical policy and medical education, while the Inter-territorial Council of the NHS has a coordination role. At regional level, the ACs hold health planning powers and the capacity to organise their own health services in their regions.

The level of expenditure on administration is relatively low. Public and total expenditure on health administration and insurance as a percentage of GDP (0.13% and 0.26%) are below the respective EU averages (0.26% and 0.38% respectively in 2015); so is public expenditure (2%) on health administration and health insurance as a percentage of total public current health expenditure (EU average of 3.4% in 2015).

Budget control is performed the same as in any other public institution. However, in the public health sector the usual tool for management is that of contract-programmes or management contracts. In the health system these contracts have the following general characteristics: they define the quantitative and qualitative objectives, the budget and the evaluation system. The time period referred to in the contracts tends to be one year. The contracts are made between the Regional Ministries and the Health Services, and between the Health Services governing bodies and the health care areas or facilities.

Role of private insurance and out of pocket co-payments

Private expenditure and out-of-pocket expenditure constitute respectively 28.7% and 24.2% of total expenditure on health in 2015. The share of out-of-pocket payments shows a slightly declining path (22% in 2005) up to a low of 19.5% on 2009 but has steadily increased since then up to 24.6% in 2014, falling then to 24.2 in 2015. It remains above the EU average of 15.9%. This may be partly due to the 2012 reform to pharmaceutical co-payments explained in more detail below. Since primary and specialist care services are provided without cost sharing, out-of-pocket spending accounts mainly for cost-sharing in the area of pharmaceuticals, medical aids and prostheses, optical and dentist services, as well as private use of private medical and hospital services.

Cost-sharing from patients is limited to medicines. The structure of pharmaceutical co-payments has

been reformed in 2012 and has different features for pensioners and non-pensioners, although in both cases there are three bands according to income (below €18,000 annual income, between €18,000 and €100,000 and above €100,000). Non-pensioners need to pay 40%, 60% and 80% of the price of medicines, with no upward limit. Pensioners pay 10% for the first two bands and 60% for the upper band, with an upward monthly limit of €8, 18 and 60. There are exemptions for those people on some social benefits, in receipt of non-contributory pensions, disabled, unemployed not on receipt of unemployment benefits and persons who have suffered occupational accidents. There is no reimbursement system; patients pay their share at the pharmacy which bills the rest to regional health services.

Civil servants' mutual funds require co-payments of 30% of the price of pharmaceuticals from all their beneficiaries (including the retired ones). Particular groups are always exempt from the full co-payments: AIDS patients and chronic diseases (both 10%, with €2.64 ceiling).

In addition, the concerns voiced regarding the length of the waiting lists have resulted in the implementation of indicators and minimum basic and (countrywide) common requirements for waiting lists for specialists, diagnostic and therapeutic trials and surgery.

Types of providers, referral systems and patient choice

The Spanish health care system is focused on primary and ambulatory care. Primary health care (PHC) is an integrated system composed of PHC centres and multidisciplinary teams providing personal and public health services in well-equipped centres. PHC is provided by general practitioners (GPs) and primary health care paediatricians, who play an important role as gatekeepers and referral points to specialists. These in turn refer patients to hospital care. Single-handed practices are restricted to small villages and to the private sector. PHC is to a great extent publicly funded and run ⁽³⁹⁸⁾. Inpatient care is provided in hospitals which are mostly publicly

⁽³⁹⁸⁾The only public-private mix is the formula of health associations used in Catalonia by delegating powers to private companies within certain geographic areas.

owned. The NHS also contracts services from private non-profit providers.

The number of practicing physicians per 100 000 inhabitants (385 in 2015) is above the average in the EU (344 in 2015). In Spain, GPs are a type of specialist (Family and Community Medicine). There are about 75 GPs per 100 000 inhabitants, below the EU average (78.3 in 2015). The average number of consultations per inhabitant per year (frequentation) ⁽³⁹⁹⁾ is, at 7.6, above the EU average of 6.2 (2014).

The number of practising nurses at 529 per 100,000 inhabitants in 2015 shows a significant increase (431 in 2003) but is far lower than the EU average (average of 833 in 2015). It should also be noted that the ratio of nurses to physicians is 1.37 in the latest available year, one of the lowest in the EU (average 2.3), indicating a likely imbalance in the health care workforce.

Given two-stage referral procedure (GP-specialist-hospital) access to inpatient care is closely controlled. This has allowed authorities to reduce capacity and activity of hospitals over the last decade. In 2015, overall capacity of hospitals was considerably lower than in most other EU countries, with 241 acute hospital beds per 100,000 inhabitants, compared to the EU average of 402 beds.

Inpatient hospital discharges per 100 inhabitants in 2013 were, at 10.2, below the EU average of 17.1. There were 8,054 day case discharges per 100,000 inhabitants in 2015, above the EU average of 7,635. As a result, the ratio of day cases to longer stays is amongst the highest in Europe, evidence of a relatively efficient use of hospital resources. Acute care bed occupancy rates in 2015 were 75.8%, slightly above the EU average of 76.8%. Average length of stay has fallen from 8.2 in 2007 to 7.3 in 2015, slightly below the EU average of 7.6. This is a reflection of the progressive shift towards ambulatory specialised care, which is resulting in procedures being performed without overnight stay that previously required admission to the hospital. Such an increase in day-hospital

places is found in both absolute numbers and in rates per 100,000 inhabitants. Note that in terms of hospital activity 44.2% of all discharges are day case discharges, far above the EU average of 32.3% in 2015.

This however puts pressure on the GP to act as effective gatekeeper and also to co-ordinate the care received by patients effectively.

Treatment options, covered health services

There is a Common Basket of services of the National Health System that has to be delivered to the whole population covered. Beyond that, specific additional services may be provided by different regions to their citizens.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Primary health care staff are paid a salary plus a capitation component (amounting to 15% of the total), which takes into account the demographic structure and the geographical dispersion of the population covered by their services.

Hospital doctors and specialists in ambulatory care units have a status similar to that of civil servants and are almost exclusively paid a salary. Both GP and hospital doctors have an additional component for professional development (professional career), and in some cases, a small additional productivity component related to performance. Other health care professions (nurses, midwives, social workers and public health professionals) are paid by salary as well.

The basic salary is regulated by the national government, although each AC has the right to vary some additional components.

Public hospital funding is generally carried out prospectively through negotiation of a contract programme between the hospital and the regional authority third-party payer, setting out the objectives (in quantity and quality) to be achieved by the hospital and assigning financial resources to these objectives. The purchasing institution then monitors the contracts according to the agreed timetable. Until the 1990s a traditional retrospective reimbursement with no prior negotiation was a routine mechanism. Then, from

⁽³⁹⁹⁾National Health System of Spain Annual Report 2011, page36;https://www.msssi.gob.es/organizacion/sns/planCalidadSNS/pdf/equidad/informeAnualSNS2011/Informe_anual_SNS_2011.pdf.

1991 first aggregate measures of activity (e.g. weighted health care unit) were defined which enabled comparison among hospitals. Over recent years some attempts have been made to develop a more sophisticated prospective payment system based on diagnosis-related groups or Patient Management Categories. Some elements have been adopted in a few autonomous communities so far, but no general trend can be specified. Public hospitals are also allowed to have another, albeit minor, source of financing, by providing services to people or schemes not covered by the NHS. On the other hand, hospitals functioning outside the NHS may provide services to the public system, which are specifically regulated by individual agreements or contracts.

The market for pharmaceutical products

The Spanish pharmaceutical market is the fourth largest in the EU-28 and eighth in the world by value. The pharmaceutical market is dominated by the state who is the main actor, responsible for regulating and authorising clinical trials, controlling the advertising of drugs, regulating the quality and manufacturing of pharmaceutical products, fixing the price of drugs, setting co-payments and establishing the list of publicly financed medicines. Once authorities decide on which products are to be reimbursed, they regulate the price of reimbursed products. The initial price decision is based on clinical performance, the cost of existing treatments, cost-plus calculations and international prices. International price referencing is based on ex-factory prices of all EU countries. Spain also uses reference pricing for reimbursement: the reimbursement level is the lowest price, calculated by cost of treatment/day for all the drugs of the same group⁽⁴⁰⁰⁾. The reference pricing mechanism in Spain tries to give a signal to the market by the regulator, aiming at manufacturers adapting their prices. Some other regulations (profit and commercial margins, limited operating hours) have been adopted to contain costs increase. Discounts and price freezes and cuts are some mechanisms used to directly control expenditure⁽⁴⁰¹⁾. The use of generic medicaments has increased in recent years since

⁽⁴⁰⁰⁾ Royal Decree Law 4/2010, March 26th.

⁽⁴⁰¹⁾ See "Analysis of differences and commonalities in pricing and reimbursement systems in Europe", Jaime Espin and Joan Rovira, 2007 for DG Enterprise and Industry.

the regulation regarding the reference pricing system was adopted in 2003 which meant important public savings.

Pharmaceutical regulation is an exclusive responsibility of the national administration, though the role of autonomous communities in modulating consumption is paramount, given their full responsibility for pharmaceutical management (through programs to improve prescription's quality and the relationship with pharmacists).

Public expenditure on outpatient pharmaceuticals (1% of GDP in 2015) has fallen from its peak of 1.24% in 2010. However, total expenditure is back at its 2013 peak of 1.7% as a proportion of GDP. Both are close to the EU average, with public expenditure being slightly lower and total expenditure slightly higher. Outpatient pharmaceutical spending as a proportion of public health spending fell from 21% in 2005 to 15.1% in 2015, still above the EU average of 12.7%. Surprisingly, although there was a marked fall in outpatient pharmaceutical expenditure after the economic crisis, hospital pharmaceutical expenditure, which was less closely monitored by the authorities, continued to increase over this period. The Spanish authorities have now required disclosure on hospital expenditure data from the regions, a welcome step that will increase transparency in this sector.

The regions have implemented several measures to promote generics prescription among physicians. However, despite these efforts, in 2017, according to AESEG (Spanish association of producers of generic medicines), the generic market remains less developed than in other EU countries, with a generic penetration by value of 21 % and by volume of 40 % (compared with 25% and 65% respectively for the EU as a whole).

Use of Health Technology Assessments and cost-benefit analysis

Health Technologies Assessment (HTA) is present both at national and regional level. The recent creation of the platform of HTA agencies (AUnETS) has marked a turning point in the direction of fostering coordination and synergies.

The regulation of the inclusion of new items in the NHS common benefits basket explicitly requires as

a previous step the appraisal by the National HTA agency in cooperation with AUnETS.

E-Health, Electronic Health Record

The "Electronic Health Record of the National Healthcare System" (Historia Clínica Digital del Sistema Nacional de Salud, HCDSNS) was initiated in 2006 with the following objectives in mind:

- To guarantee citizens' electronic access to their own health data and to the health data of those they represent that are available in digital format at any of the health services that make up the NHS, as long as they comply with the minimum security requirements laid down to protect their own data against illegal intrusion by those who have not been duly authorised to access such data.
- To ensure the healthcare professionals duly authorised by each health service for such a function can access specific personal health data sets generated by a regional authority other than the one requiring the information, as long as the user or patient seeks the professional's healthcare services at a public NHS health centre.
- To provide the NHS with a secure access system that guarantees citizens the confidentiality of their personal health data.
- The HCDSNS system should be dynamic and simple as regards access and be at the service of citizens and professionals.
- In June 2014, 20 million citizens from 15 of the 17 Autonomous Regions have shared, at least partially, their medical history, which could be consulted by healthcare professionals.

Health and health-system information and reporting mechanisms

The "Dirección General de Salud Pública, Calidad e Innovación" includes under its umbrella the "Subdirección General de Información Sanitaria e Innovación", la "Subdirección General de Calidad y Cohesión" and the Observatory of the NHS. These units concentrate the functions of

assessment and monitoring at national level and also manage the discretionary funding linked to the development of the "National Quality Plan".

Health information systems have been developed and are trying to improve coordination among regions. The "Institute of Health Information" is the repository of administrative databases and basic health-related statistics for the ACs, manages regional health data, the National Health Survey, the "Health Care Barometer" and the "National Mortality Register". All these sources of information have allowed for the building of the "Set of Key Indicators for the SNS" (INCLASNS); the chosen indicators cover demographics, health status and its determinants, health care resources supply, activity, quality, expenditure and citizens' satisfaction⁽⁴⁰²⁾.

At consultation level, ICTs are improving coordination with the implementation of electronic medical records (currently implemented within the regions; there are pilot projects across the regions⁽⁴⁰³⁾ and improving cost savings with the electronic prescription of medicaments (better follow-up of patients and avoiding misuse).

Health promotion and disease prevention policies

Health planning is a competence of the regional health departments and as such, each one develops their regional health 4-5 yearly plans (HPs). They are the principal instrument for identifying intended courses of action and planning resources towards the achievement of previously defined health goals. All share the purpose of responding to identified health needs and offering strategies for health systems action, inspired by "WHO's Health for All" and HEALTH21 strategies. These plans in turn materialise in regional strategic plans, infrastructure plans, regional health strategies and health programmes.

In terms of public intervention on lifestyle patterns, Spain has been quite successful in

⁽⁴⁰²⁾The statistic portal of National Health System is publicly available in <http://www.msps.es/estadEstudios/estadisticas/sisInfSanSN/SHome.htm>.

⁽⁴⁰³⁾ICT in the National Health System Ed. 2010 http://www.ontsi.red.es/articles/detail.action?id=4559&request_locale=en.

introducing anti-tobacco law (strict regulation of advertising and places to smoke) and enacting stricter rules on occupational health and accident prevention and in results regarding diminishing traffic accidents (through campaigns and legislation). In the area of pharmaceuticals' consumption, education is being improved by anti-self-medication campaigns and the new adaption of packages to dose prescription. The pharmaceutical co-payments described above are also likely to reduce self-medication.

Recently legislated and/or planned policy reforms

A new voluntary budget rule on healthcare spending for application at regional level was approved in mid-June 2015. The new budget rule limits growth in healthcare and pharmaceutical spending in 2015 and 2016 to the reference rate of medium-term economic growth of the Spanish economy. If eligible spending exceeds that rate, then the region concerned would be prevented from offering health care services other than those included in the national basket of health services and would be asked to apply efficiency-enhancing measures. Regional governments can comply with the rule on a voluntary basis, and financial incentives to their participation have been devised by the Ministry of Finance and the Ministry of Health in consultation with the health industry. It is however unclear at this stage how many regions will comply with this new rule. The recent Royal Decree 7/2018 extends health care cover to all foreigners that, while being in Spain, do not have their legal residence here. This implicitly includes cover for all illegal immigrants.

Challenges

Over the years, with a lower share of GDP allocated to health compared to other European countries, the Spanish NHS has shown the ability to yield sustained good results measured in different dimensions of performance:

- Population health status parameters and health care amenable outcomes.
- Coverage, access and financial equity parameters.

- Health care quality and safety.
- Users' satisfaction and system legitimated by the population.

Despite this positive achievement, the NHS is still striving to overcome certain challenges:

- Alignment of providers' incentives with the system's quality and efficiency objectives throughout the system (different levels of management, health professionals, non-health professionals, external providers ...). For example, staff incentives could be improved and adapted to rise in chronic diseases and changes in demand.
- Transition from an acute care-driven model to the management of chronic diseases, including mental disorders.
- Improve the integration of the different levels of care, increasing the resolution capacity of GP by boosting their case manager's role.
- Shifting to a user-centred model in a predominantly public provision structure, staffed mainly by civil servants and statutory personnel. It is necessary a cultural change aimed to increase the productivity of the health sector, and so on, in order to reduce waiting lists and to cope with patient's expectations.
- Improve the efficiency of pharmaceutical expenditure by increasing generic penetration and improving the transparency of hospital pharmaceutical expenditure.
- The issue of ageing workforce should be tackled, as in the rest of the EU, through the promotion of the medical education and more flexible salary regulation rewarding quality and efficient work. The imbalances in the health care workforce structure should also be tackled and the possibility of expanding the role of nurses in the provision of care considered.

Table 2.26.1: Statistical Annex - Spain

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	931	1,008	1,081	1,116	1,079	1,081	1,070	1,040	1,026	1,038	1,080	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	25.9	27.1	27.5	26.5	24.7	24.4	24.2	24.2	23.9	24.8	26.1	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	1.8	2.5	1.8	-0.5	-4.4	-0.4	-1.4	-3.0	-1.3	1.7	3.5	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	3.9	2.7	5.4	3.5	-0.7	-1.0	-3.9	-2.0	2.4	4.6	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	7.9	8.0	8.1	8.5	9.2	9.2	9.3	9.2	9.1	9.2	9.3	10.2	10.1	10.1	10.2
Total current as % of GDP	7.7	7.8	7.8	8.3	9.0	9.0	9.1	9.1	9.0	9.1	9.2	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.9	0.6	0.2	0.3
Total per capita PPS	1,784	1,928	2,050	2,199	2,272	2,256	2,235	2,143	2,103	2,153	2,268	2,745	2,895	2,975	3,305
Public total as % of GDP	5.7	5.9	5.9	6.4	7.0	6.9	6.9	6.6	6.5	6.4	6.6	8.0	7.8	7.8	8.0
Public current as % of GDP	5.5	5.6	5.7	6.1	6.8	6.8	6.7	6.6	6.4	6.4	6.5	7.7	7.6	7.6	7.8
Public total per capita PPS	1,295	1,412	1,506	1,635	1,729	1,700	1,661	1,554	1,500	1,514	1,617	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.20	0.24	0.23	0.26	0.26	0.20	0.17	0.10	0.08	0.09	0.10	0.2	0.2	0.2	0.2
Public as % total expenditure on health	72.6	73.2	73.5	74.4	76.1	75.4	74.3	72.5	71.3	70.3	71.3	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	15.4	15.3	15.4	15.3	13.8	13.5	12.6	12.1	13.0	13.0	13.5	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	98.3	:	:	:	:	99.9	99.9	:	99.9	:	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	22.0	21.3	21.0	21.0	19.5	20.7	21.1	22.8	23.9	24.6	24.2	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	43.3	44.0	44.8	45.7	46.2	46.5	46.7	46.8	46.7	46.5	46.4	502.1	503.0	505.2	508.5
Life expectancy at birth for females	83.6	84.4	84.4	84.6	85.0	85.5	85.6	85.5	86.1	86.2	85.8	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.0	77.8	77.9	78.3	78.8	79.2	79.5	79.5	80.2	80.4	80.1	76.6	77.3	77.7	77.9
Healthy life years at birth females	63.4	63.5	63.2	63.7	62.1	63.8	65.6	65.8	63.9	65.0	64.1	62.0	62.1	61.5	63.3
Healthy life years at birth males	63.3	63.9	63.5	64.0	63.1	64.5	65.4	64.8	64.7	65.0	63.9	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	61	57	56	53	51	49	97	95	91	89	88	64	138	131	127
Infant mortality rate per 1 000 live births	3.7	3.5	3.4	3.3	3.2	3.2	3.1	3.1	2.7	2.8	2.7	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.7	1.8	1.8	1.9	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.5	2.5	2.5	2.7	2.9	2.9	2.9	2.9	2.9	2.9	3.0	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.6	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.6	1.6	1.6	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	1.4	1.5	1.5	1.6	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.26.2: Statistical Annex - continued - Spain

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	22.4%	22.6%	22.6%	23.3%	23.4%	23.1%	23.9%	23.8%	23.4%	24.0%	23.8%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	2.0%	1.9%	1.9%	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	32.6%	32.5%	32.4%	32.4%	31.7%	31.8%	31.7%	32.1%	31.7%	32.0%	32.2%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	20.7%	19.6%	19.0%	18.5%	18.2%	18.2%	17.8%	17.6%	18.6%	18.0%	18.0%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	3.3%	3.5%	3.8%	4.0%	3.9%	4.1%	4.0%	4.0%	4.1%	4.3%	4.3%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	2.5%	2.4%	2.6%	2.4%	2.8%	2.3%	2.2%	2.1%	2.0%	2.0%	2.0%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	3.3%	3.4%	3.4%	3.3%	3.3%	3.0%	3.2%	3.0%	3.0%	2.9%	2.8%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	28.4%	28.6%	28.6%	29.5%	29.2%	29.0%	30.1%	30.7%	30.9%	31.3%	31.8%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	2.7%	2.7%	2.6%	2.6%	2.7%	2.7%	2.7%	2.7%	2.8%	2.8%	2.9%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	26.1%	26.2%	26.5%	26.9%	26.3%	26.1%	26.4%	26.7%	26.7%	26.6%	26.6%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	21.0%	19.9%	19.3%	18.7%	18.3%	18.4%	17.1%	15.9%	15.9%	15.7%	15.1%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.3%	0.3%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	3.3%	3.4%	3.3%	3.3%	3.7%	3.1%	3.0%	2.9%	2.8%	2.8%	2.8%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	2.2%	2.1%	2.3%	2.1%	2.4%	2.1%	2.1%	2.1%	2.2%	1.9%	2.0%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.81	0.88	0.93	:	:	1.21	1.39	1.48	1.53	1.55	1.59	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	:	:	0.5	0.5	0.6	0.6	0.6	0.6	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	:	:	:	:	:	1.6	1.7	1.7	1.8	1.8	1.8	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	:	:	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	14.9	:	15.7	15.7	:	16.6	..	:	16.2	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	26.4	:	25.2	26.2	:	23.9	:	:	23.0	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	11.9	11.9	11.1	10.2	10.0	9.8	9.6	9.3	9.3	:	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	357	365	359	358	363	380	388	382	381	380	385	324	330	338	344
Practising nurses per 100 000 inhabitants	439	449	464	486	500	521	528	524	514	515	529	837	835	825	833
General practitioners per 100 000 inhabitants	72	73	70	73	74	75	75	75	75	75	75	77	78	78	78
Acute hospital beds per 100 000 inhabitants	267	263	262	258	255	251	246	238	236	237	241	416	408	407	402
Outputs															
Doctors consultations per capita	:	8.1	:	:	7.5	:	7.4	:	:	7.6	:	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	11	11	11	11	10	10	10	10	10	10	10	17	16	16	16
Day cases discharges per 100 000 inhabitants	:	3,026	4,382	:	5,784	6,206	4,069	7,216	6,465	8,001	8,054	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	79.0	78.0	78.2	77.7	77.6	76.4	75.4	75.8	75.8	75.7	75.8	77.1	76.4	76.5	76.8
Hospital average length of stay	6.7	6.6	8.2	8.1	8.0	7.9	7.7	7.6	7.6	7.4	7.3	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	22.0	29.1	:	35.7	37.7	28.7	42.1	39.4	44.1	44.2	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	5.9	6.0	6.2	6.4	6.5	6.7	6.8	6.8	6.8	6.7	6.6	6.4	Spain	EU	
AWG risk scenario	5.9	6.1	6.4	6.6	6.9	7.1	7.2	7.3	7.4	7.3	7.2	7.1	0.5	0.9	
Note: *Excluding expenditure on medical long-term care component.													1.2	1.6	
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	46.4	46.6	46.8	47.1	47.6	48.2	48.9	49.3	49.5	49.6	49.8	49.8	Spain	EU	
													7.3	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.27. SWEDEN

General context: Expenditure, fiscal sustainability and demographic trends

General country statistics: GDP, GDP per capita; population

Sweden had a population of almost 9.9 million inhabitants in 2016, which is expected to reach 13.9 million in 2070. This is a 40% increase that is contrast with the 2% overall increase in the EU over this period. With a GDP of more than €449 billion, or 33,700 PPS per capita, it is above the EU average of 29,600 PPS per capita in 2015.

Total and public expenditure on health as % of GDP

Total expenditure ⁽⁴⁰⁴⁾ on health as a percentage of GDP (11.6% in 2015) is above the EU average ⁽⁴⁰⁵⁾ (10.2%). It has grown gradually from 8.7% in 2005, although it has been relatively flat since 2012 ⁽⁴⁰⁶⁾. Public expenditure on health as a percentage of GDP is, at 9.6% in 2015 also above the EU average of 8%. Looking at health care without long-term care ⁽⁴⁰⁷⁾ reveals a different picture, with public spending at the EU average (6.9% vs 6.8% in 2015).

Total (4,314 PPS in 2015) and public (3,580 PPS in 2015) per capita expenditure is above the EU average (3,305 PPS and 2,609 PPS in 2015), having consistently increased since 2005 (2,514 PPS and 1,985 PPS). Again, this is likely to be influenced by the costs of LTC, which underlines the importance of considering this when making cross-country comparisons.

⁽⁴⁰⁴⁾ Data on health expenditure is taken from OECD health data and Eurostat database. The variables total and public expenditure used here follow the OECD definition under the System of Health Accounts and include HC.1-HC.9 + HC.R.1.

⁽⁴⁰⁵⁾ The EU averages are weighted averages using GDP, population, expenditure or current expenditure on health in millions of units or units of staff where relevant. The EU average for each year is based on all the available information in each year.

⁽⁴⁰⁶⁾ Please note that there was a break in the series in 2011.

⁽⁴⁰⁷⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

Expenditure projections and fiscal sustainability

As a result of ageing ⁽⁴⁰⁸⁾, health care expenditure is projected to increase by 0.7 pps of GDP (much below the average change in the EU of 0.9 pps). Good health (translated by a constant health scenario) could reduce the projected expenditure increase to zero, highlighting the importance of improving health behaviour.

Fiscal sustainability risks appear to be low in Sweden over the low, medium and long-term ⁽⁴⁰⁹⁾.

Health status

Life expectancy (84.1 years for women and 80.4 years for men in 2015) is above the EU average (83.3 and 77.9) and among the highest in the world. Healthy life years (73.8 years for women and 74 for men in 2015) are above the EU average (63.3 and 62.6 respectively).

There are two major causes of death in Sweden ⁽⁴¹⁰⁾. Mortality and morbidity due to diseases of the circulatory system has been significantly reduced during the last 30 years and this is one of the major causes contributing to the rise in life expectancy but they are still the most common cause of death for both women and men, being the underlying cause in 37% of all deaths among women and 36% of all deaths among men in 2014.

The second most common cause of death is neoplasm (cancer), corresponding to 23% of all deaths among women and 27% among men in 2014.

Alzheimer's and other dementia conditions have taken the place of stroke in the top three causes of death in Sweden. To some extent this reflects the ageing of the population, improvements in diagnosis of these conditions but not in terms of

⁽⁴⁰⁸⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁴⁰⁹⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁴¹⁰⁾ State of Health in the EU: Sweden Country Health Profile 2017, European Commission, OECD and European Observatory on health systems and policies. https://ec.europa.eu/health/sites/health/files/state/docs/chp_sv_english.pdf.

effective treatments to cure them as well as more precise coding as cause of death.

System characteristics

System financing, revenue collection mechanism, coverage and role of private insurance and out of pocket co-payments

The level of taxes to be earmarked to the health sector is defined by the central government (general taxation), the county councils or regions (county council taxation) and the municipalities (for local taxes). The Parliament, the central government, the county councils and the municipalities set the public budget for health, in each respective responsibility. The funds to be allocated to each sector/ type of care are determined by the counties or regions and the municipalities given their respective responsibilities. Hospitals then exercise their autonomy to recruit medical staff and other health professionals and negotiate salaries. The Ministry of Social Affairs and Health defines general policy guidelines and regulation.

This suggests a rather complex and decentralised decision making and resource allocation process, within a nationally agreed regulatory framework but in the presence of a not explicitly defined basic benefit package. Nevertheless, the level of expenditure in administering such a system is not high. Public (0.17%) and total (0.19%) expenditure on health administration and health insurance as a percentage of GDP is below the EU average (0.26% and 0.38% respectively in 2015), as is public and total expenditure on health administration and health insurance as a percentage of current health expenditure (1.7% and 1.8% vs. 3.8% and 3.4% in 2015), falling behind by a substantial margin as well.

This decentralised tradition has however also led to regional differences in terms of cost-sharing, type of treatment, access to new medicines and inequalities in avoidable care and mortality. These regional differences as well as care coordination difficulties between counties and municipalities and access to health care have been the focus of debate in the 2000s ⁽⁴¹¹⁾.

⁽⁴¹¹⁾ WHO/Europe (2012b).

Interestingly, while in the 1990s mostly county councils were using a purchaser-provider split, they now appear to have gone back to the more traditional way of public provision and administration. In some counties there has been a move towards integrating each hospital with primary care and municipal services.

There is a strict health budget defined annually by regions and for different health services. Budget deficits in the sector have occurred in the past and have resulted in several cost-containment policies and stricter budget rules ⁽⁴¹²⁾.

Administrative organisation: levels of government, levels and types of social security settings involved, Ministries involved, other institutions

On the basis of legal provisions (harmonised legislation and guidelines) and under the supervisor role of the Government through the Ministry of Health and Social Affairs, the county councils or regions and the municipalities are responsible for providing or funding a wide range of health-related services. Regionally organised services include primary, specialist outpatient and hospital care, health promotion, disease prevention and rehabilitation.

Coverage (population)

A regionally based National Health Service (NHS), funded by taxes (central, county and municipal taxes), provides universal population coverage.

To improve access and reduce the waiting times to health care, the national time guarantee for care (i.e. care must be provided within 3 months) has been sharpened. The government has also invested SEK 2 billion between 2015 and 2018 to increase access to cancer care. The funds have been used to stimulate the implementation of standardised patient pathways in cancer care. This builds on the Danish example with specially designed tracks for different kind of cancers.

⁽⁴¹²⁾ According to the OECD, Sweden scores 6 out of 6 in the OECD scoreboard due to the very stringent budget controls.

Hence, some efforts to improve access may help explain the increase in public and total expenditure observed since 2012 though it does not appear to be the main explanation.

Role of private insurance and out of pocket co-payments

Most services (primary, outpatient specialist care, hospital day care and inpatient care, dental care, physiotherapy) involve a co-payment at the point of use. This fee may vary across services and across counties or regions. In addition, eyeglasses and contact lenses are not funded or provided by counties or regions and high cost-sharing applies to dental care, dental prostheses and pharmaceuticals. It is not clear whether the current cost-sharing design induces a greater use of more cost-effective services (e.g. primary care vs. specialist care when this is not necessary). Children, those with certain medical conditions and those who have reached an upper limit for out-of-pocket payments are exempted from cost-sharing. 2.3% of the population buys supplementary private insurance (to cover the services not covered by public provision/funding). In 2015, private expenditure and out-of-pocket expenditure were 17% and 15.2% of total health expenditure and therefore respectively below and above the EU average (21.6% and 15.9%).

Types of providers, referral systems and patient choice

As care provision is defined at the county level, there are some differences in the way the various types of care are organised. In general, primary care is provided by general practitioners (GPs) in public health centres while outpatient specialist care is provided in outpatient departments in public hospitals. There are 102 hospitals in Sweden, many of which are local hospitals with limited specialisation, some of which are regional hospitals offering a wider range of specialties. In addition, 7 are regional highly specialised university hospitals. About 98% of all hospital beds are public. Provision has traditionally been public but private provision notably in terms of private primary care providers, with whom the councils or regions establish contracts, has been encouraged. Some hospitals are run by private companies but are financed by public funds. There are also some private practices of physiotherapists

or psychiatric care. Private provision is more common in densely populated urban areas. Still, dual practice of private physicians should be of minor significance, since private practitioners who are reimbursed according to a national tariff are prevented by law to also occupy public-sector employment.

The number of practising physicians per 100 000 inhabitants (419 in 2014) is above the EU average (343 in 2014) and showing a consistent increase since 2005 (352). The number of GPs per 100 000 inhabitants (65 in 2014) is below the EU average (79 the same year), but showing a gradual increase from 2005. The number of nurses per 100 000 inhabitants (1,114 in 2014) is well above the EU average (829 in the same year) having consistently increased throughout the decade. The authorities acknowledge shortages of physicians in some specialties and in some counties. In particular, they acknowledge a general shortage of GPs, especially significant in certain municipalities, which results in longer waiting times to see a GP. As a consequence, patients tend to see specialists or go to emergency care directly but unnecessarily. This has forced some counties to recruit GPs from abroad or pay higher wages, increasing the costs of health care delivery. The government have invested several billion SEK the past years to strengthen the provision of skills in health care. The funds can e.g. be used to improve the skill mix in health care. Staff supply is regulated in terms of quotas for medical students and by speciality but not in terms of the location of physicians, which may help explain the disparities in staff availability across counties or regions.

The number of acute care beds per 100 000 inhabitants (226 in 2015) is far below the EU average of 402 in 2015, displaying a decreasing trend over the last decade and is one of the lowest in the EU ⁽⁴¹³⁾. However, structural differences have to be taken into account when analysing these figures. For instance, the "Ädel-reform" of 1992 transferred the responsibility for those considered medically treated to the social care sector (especially the elderly, who instead receive social care in the elderly care sector), which had a significant impact on demand for health care beds. In addition, the average length of stay has been

⁽⁴¹³⁾ This phenomenon has intensified in the last few years and the latest figures show even lower bed numbers.

effectively shortened in Sweden by utilising open specialised care to a larger extent than previously. Still, in some areas there may be a shortage of follow-up/long-term care beds/ facilities which creates bed-blockages in acute care (unnecessary and long use of acute care beds) and may contribute to longer waiting times for surgery. While counties or regions plan for the number of hospitals and the provision of specific specialised services, there appears to be no regulation in terms of the number of beds or the supply of high cost equipment capacity, which may explain county/ regional and even hospital differences in the numbers of units of high-cost equipment. Hospitals have autonomy to recruit medical staff and other health professionals and to determine their remuneration level.

Pricing, purchasing and contracting of healthcare services and remuneration mechanisms

Salaries for public sector physicians (GPs and specialists) are determined at hospital level. Physicians appear not to be eligible to receive bonuses regarding their activity or performance⁽⁴¹⁴⁾. It would perhaps be interesting to investigate if an element of performance-based payment related to health promotion, disease prevention or disease management actions or treatment of vulnerable patients by GPs could be used more widely, to render primary care more attractive in general and in the regions where the more severe shortages are felt in particular.

When looking at hospital activity, inpatient discharges - per 100 inhabitants - are below the EU average (14.1 vs. 16.2) and the number of day case discharges is well below the EU average (1,364 vs. 7,635 in 2015). The proportion of surgical procedures conducted as day cases (8.6%) is far below the EU average (32.3% in 2015). Overall hospital average length of stay (5.9 days in 2015) is also below the EU average (7.6 days in 2015). These figures suggest that there may be some room

⁽⁴¹⁴⁾As for the private practitioners, they are reimbursed according to a national tariff, and thus compensated on a fee- for-service basis. A small portion of the private health care production is in fact conducted by private practitioners. Other private health care production is instead based on local contractual arrangements where decisions on doctors' payment in large are decentralised to the private healthcare provider.

to increase hospital throughput/efficiency by improving the way surgical treatments are conducted (i.e. more use of day case surgery) and by providing alternative care services for long-term care patients in particular psychiatric patients. These figures may explain why waiting times for elective surgery may be deemed long.

The market for pharmaceutical products

Total (1.1%) and public (0.6%) expenditure on pharmaceuticals as a percentage of GDP⁽⁴¹⁵⁾ was below the EU average (respectively 1.4% and 1%) in 2015. This is similar for total (9.8% vs. the average of 14.6% in 2015) and public (6.1% vs. EU average 12.7% in 2015) pharmaceutical expenditure as a percentage of total and public current health expenditure respectively.

When it comes to the out-patient sector, the authorities have implemented several policies to control expenditure on pharmaceuticals. There is a positive list of reimbursed products. Decisions on pricing and reimbursement of pharmaceuticals need to be in-line with the ethical platform, which is legislated and applies to all prioritising of publicly funded health care in Sweden. The three principles: the human value principle, the need and solidarity principle and the cost-effectiveness principle. Managed Entry Agreements between pharmaceutical companies and county councils are used for some products to dampen the cost and provide better conditions for early and equal access. Authorities promote rational prescribing of physicians through treatment and prescription guidelines complemented with monitoring of prescribing behaviour and education and information campaigns on the prescription and use of medicines. There are monthly, quarterly and annual evaluations at county council level on prescriptions and co-payments and physicians receive feedback. These are coupled with pharmaceutical budgets at county level. Patients pay the full price up to a certain cost level (SEK 1125), after which there are some stepwise reductions in the additional costs. In a year the maximum amount a patient can pay in reimbursable medicines is SEK 2300. There is an

⁽⁴¹⁵⁾Expenditure on pharmaceuticals used here corresponds to category HC.5.1 in the OECD System of Health Accounts. Note that this SHA-based estimate only records pharmaceuticals in ambulatory care (pharmacies), not in hospitals.

explicit generics policy. Generic substitution takes place i.e. pharmacies are obliged to dispense the cheaper product and to replace the prescription by a generic medicine when available. If patients refuse a generic they will have to pay the difference between the reimbursement price of the branded drug and the pharmacy retail price of the cheapest available generic. Moreover, this cost is deemed extra and will not be considered in the computation of the maximum costs a patient can incur in a year on medicines. Generics face a fast track registration and speedy decision.

Use of Health Technology Assessments and cost-benefit analysis

The Swedish Council on Health Technology Assessment conducts and gathers information on health technology assessment and conducts economic evaluation and cost-effectiveness analysis which is used to define whether new medicines are covered by the health system and to what extent (level of reimbursement) as well as to define clinical guidelines for medicines.

Health and health-system information and reporting mechanisms

Sweden has extensive information management and statistics systems and comprehensive data is gathered on physician and hospital activity and quality and health status. Data is provided at county/ region and municipal level and compiled by the Swedish Association of Local Authorities and Regions (SALAR) together with the National Board of Health and Welfare. Some of this information is published, and allows for public comparisons of counties/ regions and hospitals in terms of both activity and quality. Physicians are monitored and are given feedback on their prescription behaviour.

Public health promotion and disease prevention policies

The central Government, through the Ministry of Health and Social Affairs, sets and monitors public health priorities in terms of process, outcomes and the reduction of health inequalities. As section 1 suggests there are some risk factors that can translate into an important burden of disease and financial costs. Authorities have emphasised health promotion and disease prevention measures in

recent years. Promotion and prevention are seen by the authorities as a means to ensure long-term sustainability of the health budget: they reduce the development of disease and therefore the need for care and therefore the need for funding. Public and total expenditure on prevention and public health services as a % of GDP are both above the EU average (0.17% and 0.26% in 2015). Similarly, as a % of total current health expenditure, both public and total expenditure on prevention and public health services are higher than the EU average (1.8% for both vs. 3.4% in 2015).

Recently legislated and/or planned policy reforms

Recent policy response

In an effective healthcare, patients receive care at the right level. The structure in Swedish health care has been a contributing factor to inefficiency in the healthcare system. There has therefore been a need for profound structural changes in all levels of health care, and primary care has been needed to be strengthened. Less focus should be put on hospital care. Primary care should be the natural first choice for anyone seeking care, especially when in need for regular care contacts. To this end, primary care must be changed and be able to meet the challenges it faces, including a demographic development with an aging population and increasing numbers of people living with chronic diseases. In order to achieve increased quality, better accessibility and more efficient use of resources, changes in the structure and the way of organising care are being put forward. The foundation is a good and close care that is based on the patient's needs. The "health care guarantee" has also been strengthened, as stated above. The government has also proposed a new provision in the Health Care Act regarding how the health care is organised. The Swedish parliament has enacted this provision into new legislation.

Furthermore, the government has taken steps to concentrate highly specialised care on fewer units in the country. This type of care can be developed to give patients access to a more equal and safe care of good quality regardless of their place of residence. The National Board of Health and Welfare has been commissioned to lead the work with concentrating highly specialised health care.

A top priority for the government has been to strengthen the position of patients and to stimulate patient engagement. Taking advantage of the opportunities provided by digitalisation, improving quality registers, strengthening women's health and maternity care have been other important reform areas.

Six regional cancer centres were established in 2010. They work across counties to develop cancer care. This model is now serving as an example of how to improve care also for other patient groups.

Policy changes under preparation/adoption

A primary objective of the Swedish health care system is the provision of high-quality care on equal terms, irrespective of the person receiving it. Reception, care, and treatment shall be offered on equal terms to everybody – irrespective of age, gender, sexual orientation, disability, place of residence, education, social status, country of birth or religious beliefs. Equality and equity of care are at the very heart of the Swedish Health and Medical Services Act.

A new government took office in Sweden at the end of January 2019. In the agreement between the parliamentary parties supporting the new government there are several points concerning health care.

An updated queue billion is introduced covering the entire care chain, taking special account of the needs of chronically ill patients. A master plan for shortening queues will be produced together with the county councils. Ambulance care, cancer care and maternity care should be strengthened.

The system with patient contracts will continue to be implemented. The aim is that people should know who to contact in health care and what the plan for your treatment looks like.

Transparency and follow-up regarding information on waiting times, availability and quality in health care should increase. The patients right to information and the right to choose should be protected and developed.

The responsibility for children's health, from maternity care until 18 years old need to be coordinated better. A public inquiry is to be

appointed concerning how the coordination can be strengthened around the health around the children and the youth.

The right to a permanent medical doctor should be secured. It should become more attractive for physicians to work in primary care and thereby increasing accessibility and freedom of choice. It should be easier to be care provider in rural parts of Sweden.

A long-term plan for national coordination of skills supply in health care is implemented.

Psychiatry and school health care should be strengthened. A public inquiry will be appointed into how to create a new type of care where patients is provided help quicker for lighter forms of mental illnesses.

Challenges

The analysis above has shown that a range of reforms has been implemented in recent years. For example, the reduction of waiting times, improvements to hospital efficiency, improved data collection and monitoring and the control of pharmaceutical expenditure, some to a large extent successful, and which Sweden should continue to pursue. The main challenges for the Swedish health care system are as follows:

- To ensure the coherence of resource allocation to different types of care in different regions controlling for demographic and mortality/morbidity characteristics of the population.
- To ensure consistency in access to health care in different regions, ensuring that different fees and remuneration mechanisms do not impact on the health outcomes of the population.
- More generally, to develop a comprehensive human resources strategy that tackles current shortages in primary care staff and ensures sufficient numbers of staff in general and in the future in view of staff and population ageing.
- To enhance primary care provision by increasing the numbers and spatial distribution of GPs and primary care nurses. To couple

these measures with a referral system to specialist care either through financial incentives (reimbursement levels higher if a referral takes place) or by making it compulsory. At the same time exploring if current cost-sharing arrangements can be adjusted to render primary care more attractive. This could improve access to care while reducing unnecessary use of hospital care and therefore overall costs.

- To increase hospital efficiency by increasing the use of day case surgery and increasing the supply of follow-up care for long-term care patients so as to reduce the unnecessary use of acute care settings for long-term care patients, notably psychiatric patients. To consolidate the measures pursued in recent years to reduce duplication and improve efficiency and quality in the hospital sector (e.g. concentration and specialisation of hospitals within regions), notably through the finalisation of the current administrative reform.
- To ensure a greater use of health technology assessment to determine new high-cost equipment capacity as well as the benefit basket and the cost-sharing design across medical interventions as is currently done with medicines.
- To consider whether it is worth introducing some element of performance related payment in physicians' remuneration (e.g. through the use of mixed payment schemes) to encourage health promotion, disease prevention and disease management activities or the treatment of vulnerable populations and increase outpatient output.
- To take into account the potential drivers of fiscal sustainability particularly with ageing potentially increasing public healthcare spending in the long-run.

Table 2.27.1: Statistical Annex - Sweden

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	313	335	356	352	310	369	405	423	436	433	449	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	32.3	34.0	35.7	34.2	30.5	31.8	32.6	33.0	32.5	32.6	33.7	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	2.4	4.1	2.6	-1.3	-6.0	5.1	1.9	-1.0	0.4	1.6	3.4	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	2.5	1.9	2.0	1.1	0.4	27.2	1.0	1.8	2.0	2.3	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	8.7	8.6	8.5	8.8	9.4	9.0	11.3	11.5	11.7	11.7	11.6	10.2	10.1	10.1	10.2
Total current as % of GDP	8.3	8.2	8.1	8.3	8.9	8.5	10.7	10.9	11.1	11.1	11.0	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.9	0.6	0.2	0.3
Total per capita PPS	2,443	2,562	2,688	2,726	2,555	2,883	3,918	4,150	4,297	4,246	4,314	2,745	2,895	2,975	3,305
Public total as % of GDP	7.1	7.0	6.9	7.2	7.7	7.4	9.4	9.6	9.7	9.7	9.6	8.0	7.8	7.8	8.0
Public current as % of GDP	6.8	6.7	6.6	6.8	7.3	7.0	9.0	9.1	9.3	9.3	9.2	7.7	7.6	7.6	7.8
Public total per capita PPS	1,985	2,081	2,187	2,223	2,086	2,349	3,276	3,454	3,571	3,514	3,580	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.29	0.27	0.31	0.36	0.38	0.40	0.45	0.43	0.42	0.39	0.40	0.2	0.2	0.2	0.2
Public as % total expenditure on health	81.3	81.2	81.4	81.5	81.6	81.5	83.6	83.2	83.1	82.7	83.0	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	12.7	12.9	12.8	12.0	14.8	14.3	14.0	13.6	12.9	13.2	13.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	17.1	17.0	16.9	16.9	16.9	16.9	15.0	15.4	15.5	15.5	15.2	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	9.0	9.0	9.1	9.2	9.3	9.3	9.4	9.5	9.6	9.6	9.7	502.1	503.0	505.2	508.5
Life expectancy at birth for females	82.9	83.1	83.1	83.3	83.5	83.6	83.8	83.6	83.8	84.2	84.1	82.6	83.1	83.3	83.3
Life expectancy at birth for males	78.5	78.8	79.0	79.2	79.4	79.6	79.9	79.9	80.2	80.4	80.4	76.6	77.3	77.7	77.9
Healthy life years at birth females	63.2	67.5	66.8	69.0	69.6	66.4	65.5	:	66.0	73.6	73.8	62.0	62.1	61.5	63.3
Healthy life years at birth males	64.5	67.3	67.7	69.4	70.7	67.0	67.0	:	66.9	73.6	74.0	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	57	56	53	55	52	49	106	102	102	98	97	64	138	131	127
Infant mortality rate per 1 000 live births	2.4	2.8	2.5	2.5	2.5	2.5	2.1	2.6	2.7	2.2	2.5	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.3	2.3	2.2	2.2	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.9	2.9	2.9	3.0	3.2	3.1	3.1	3.2	3.2	3.3	3.2	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	1.2	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Prevention and public health services	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	2.3	2.2	2.2	2.2	2.4	2.2	2.2	2.3	2.3	2.3	2.2	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	2.2	2.2	2.2	2.3	2.5	2.4	2.4	2.5	2.5	2.5	2.5	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
Health administration and health insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.27.2: Statistical Annex - continued – Sweden

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data			
												2009	2011	2013	2015
Inpatient curative and rehabilitative care	27.8%	27.9%	27.4%	27.0%	26.8%	26.7%	21.3%	21.1%	20.8%	20.8%	20.6%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	1.8%	2.0%	2.1%	2.2%	2.3%	2.2%	1.9%	1.9%	2.0%	1.7%	1.8%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	34.9%	35.0%	35.6%	35.9%	35.9%	36.6%	29.1%	29.3%	29.2%	29.6%	29.2%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	13.9%	14.0%	13.8%	13.6%	13.5%	13.3%	10.2%	10.1%	9.8%	9.8%	9.8%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	3.3%	3.2%	3.1%	3.0%	3.0%	3.1%	2.3%	2.4%	2.4%	2.3%	2.5%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	3.3%	2.9%	3.2%	3.4%	3.7%	3.4%	2.9%	2.9%	3.2%	3.0%	3.1%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	1.1%	1.1%	1.4%	1.3%	1.6%	1.5%	1.2%	1.5%	1.4%	1.5%	1.7%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	33.2%	33.5%	32.8%	32.5%	32.3%	32.2%	25.0%	24.8%	24.5%	24.5%	24.3%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	2.2%	2.4%	2.4%	2.6%	2.7%	2.7%	2.2%	2.2%	2.3%	2.0%	2.2%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	32.1%	32.5%	33.0%	33.4%	33.4%	34.1%	26.4%	26.8%	26.6%	27.3%	27.1%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	10.5%	10.3%	10.1%	9.9%	9.5%	9.5%	7.1%	6.7%	6.3%	6.0%	6.1%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	1.6%	1.5%	1.5%	1.5%	1.4%	1.4%	1.1%	1.1%	1.2%	1.1%	1.2%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	3.1%	2.8%	3.2%	3.4%	3.7%	3.5%	2.8%	2.8%	3.1%	3.0%	3.1%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	1.3%	1.3%	1.5%	1.5%	1.8%	1.7%	1.3%	1.6%	1.6%	1.6%	1.8%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	0.1	:	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	10.9	9.0	10.6	10.3	10.9	11.3	11.0	11.8	11.7	13.4	12.3	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	15.7	15.2	13.8	14.6	14.0	13.6	13.1	12.8	10.7	11.9	11.2	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	6.5	6.5	6.9	6.9	7.3	7.2	7.4	7.2	7.3	7.3	:	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	352	361	369	375	382	389	397	405	413	419	:	324	330	338	344
Practising nurses per 100 000 inhabitants	1074	1089	1099	1102	1102	1109	1111	1114	1116	1114	:	837	835	825	833
General practitioners per 100 000 inhabitants	59	61	62	62	63	63	63	64	65	65	:	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	2.8	2.8	2.8	2.9	2.9	2.9	3.0	2.9	2.9	2.9	2.9	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	15	15	15	15	15	15	:	:	15	15	14	17	16	16	16
Day cases discharges per 100 000 inhabitants	1,296	1,291	1,334	1,335	1,391	1,398	:	:	2,038	1,392	1,364	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	6.3	6.3	6.5	6.5	6.5	6.0	5.9	5.8	5.8	5.8	5.9	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	8.2	8.1	:	:	8.4	8.4	:	:	12.0	8.7	8.6	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	6.9	7.0	7.1	7.2	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	Sweden	EU	
AWG risk scenario	6.9	7.1	7.3	7.5	7.7	7.8	8.0	8.1	8.2	8.3	8.4	8.5	0.7	0.9	
Note: *Excluding expenditure on medical long-term care component.													1.5	1.6	
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	9.8	10.3	10.8	11.2	11.6	12.0	12.3	12.7	13.0	13.3	13.6	13.8	Sweden	EU	
													40.5	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

2.28. UNITED KINGDOM

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

In 2015, the UK had a GDP per capita of 29,112 PPS (in thousands), slightly below the EU average of 29,610 PPS. Population was estimated at 64.9 million in 2015. According to Eurostat projections, total population in the United Kingdom is projected to increase from around 65.4 million in 2016 to 81 million in 2070, with an increase of 23.8%, well above EU average level of 2.0%.

Total and public expenditure on health as % of GDP

Total expenditure on health as a percentage of GDP (10.2% in 2015) has increased over the past decade (7.6% of GDP in 2005), and is currently in line with the EU average of 10.2% for the same year. Public (total) expenditure is at 8.1% of GDP, in line with the EU average (8.0% in 2015) and similarly it has increased throughout the past decade (6.1 % in 2005).

When expressed in per capita terms, total spending on health at 3,223 PPS in the UK was only slightly below the EU average of 3,271 PPS in 2015. The opposite applies to public spending on health care, which was above the EU average value in 2015, with 3,041 PPS vs. an average of 2,609 PPS. Looking at health care without long-term care⁽⁴¹⁶⁾ reveals a similar picture, with spending at the EU average (6.8% vs 6.8% in 2015).

Expenditure projections and fiscal sustainability

As a consequence of demographic changes, health care expenditure is projected to increase by 1.4 pps of GDP, above the average growth expected for the EU (0.9 pps), according to the "AWG reference scenario"⁽⁴¹⁷⁾. When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health

⁽⁴¹⁶⁾ To derive this figure, the aggregate HC.3 is subtracted from total health spending.

⁽⁴¹⁷⁾ See The 2018 Ageing Report at https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

care expenditure is expected to increase by 2.4 pps of GDP from now until 2070 (EU: 1.6 pps).

Sustainability risks emerge in the medium term, with the S1 indicator at 1.3 pps of GDP. These are primarily related to the current high level of government debt (contributing 1.7 percentage points of GDP) and projected ageing costs (0.7 percentage point of GDP). The long-term fiscal sustainability risk indicator S2 is at 3% of GDP. Compounding this result with the vulnerabilities linked to historical behaviour, captured by the DSA risk assessment, the United Kingdom appears to face high fiscal sustainability risks, also related to projected ageing costs, which contribute 3.3 percentage points of GDP⁽⁴¹⁸⁾.

Health status

Life expectancy at birth (82.8 years for women and 79.2 years for men in 2015) is, respectively, below and above EU averages (83.3 for women and 77.9 for men in 2015)⁽⁴¹⁹⁾. In the same year, healthy life years, at 63.3 years for women and 63.7 years for men, are slightly above the EU average for men, compared to, respectively, 63.3 and 62.6 for the EU in 2015. The infant mortality rate of 3.9‰ is higher than the EU average of 3.6‰ in 2015, having gradually fallen over the last decade (from 5.1‰ in 2005).

As for the lifestyle of the UK population, the proportion of regular smokers of 19.0% in 2014 is below the EU average (21.8% in 2013 and 20.9% in 2015). Obesity rates in the population are, at 19.8% (latest available figure for 2014), well above the EU average of 15.4% in 2015 (15.5% in 2013). Alcohol consumption is, at 10.7 litres per capita, slightly higher than the EU average of 2015 (10.2 litres per capita)⁽⁴²⁰⁾.

⁽⁴¹⁸⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁴¹⁹⁾ Data on health status including life expectancy, healthy life years and infant mortality is from the Eurostat database. Data on life-styles is taken from OECD health data and Eurostat database.

⁽⁴²⁰⁾ However the OECD reports the UK as characterised by levels of alcohol consumption to have increased during the last 30 years. <http://www.oecd.org/unitedkingdom/Health-at-a-Glance-2015-Key-Findings-UK.pdf>.

System characteristics

Coverage

Services are free at the point of need to all residents. Cost-sharing is limited and applies to some prescription drugs (90% of prescriptions are dispensed with no charge), optical and dental services. Cost-sharing schemes vary across the four countries (e.g. there are no prescription fees in Wales and reduced prescription fees in Scotland). Eyeglasses and contact lenses are mostly not funded or provided by the NHS. Children, elderly, pregnant women, those with certain medical conditions, those with an income below a certain threshold, beneficiaries of social benefits and those who have reached an upper limit for out-of-pocket payments are exempted from cost-sharing. In addition, dental charges are regulated to limit the overall cost of a course of treatment. As for prescriptions, these cost £8.20 per item. It is however possible to purchase coverage for all such costs incurred over a 3-month or 12-month period.

Current government policy is to increase access by increasing the choice of primary care physicians by extending service opening hours to evenings and weekends. This is seen as a means to improve access and reduce the waiting times for primary care visits. There are also targets to receive treatment following a GP referral (such as an 18-week target in England). Patients waiting longer than the target were sometimes referred for treatment to private hospitals or hospital abroad. Both inpatient and outpatient waiting time statistics are published across the four countries in the UK. In addition, public comparisons of different health services in terms of several performance indicators are available to help patients exercise choice and to encourage providers to improve their activities.

Surveys show that patients are generally satisfied with the NHS, especially those who have received NHS care.

Administrative organisation and revenue collection mechanism

The total budget of public funds to be allocated to the health sector is defined by the UK Parliament, the UK government and the Scottish, Welsh and Northern Ireland governments. Scotland, Wales

and Northern Ireland receive a funding block from HM Treasury and are responsible for the resource allocation in their respective countries. The central government determines resource allocation across countries and regions based on demographic and mortality/morbidity data and historic costs. The funds to be allocated to each sector/ type of care are determined by the UK government and the Scottish, Welsh and Northern Ireland governments given their respective responsibilities. The Department of Health and Social Care (DHSC) defines general policy guidelines and priorities for the NHS in England, to which it allocates the budget. DHSC uses part of the budget received by the Treasury to cover running costs, finance arms' length bodies and other issues of national relevance such as public health. The rest flows to NHS England, responsible for the national-level commissioning of a restricted set of services (specialised services, primary care, offender healthcare and some services for the armed forces) that allocates resources to Clinical Commissioning Groups (CCGs, formerly PCTs), responsible for the local commissioning of healthcare services.

The head of the DHSC, the Secretary of State for health responds to the UK Prime Minister. The basic benefit package is not explicitly defined but, through periodic assessments, the National Institute for Health and Care Excellence evaluates some interventions, medical devices and pharmaceuticals on the grounds of their clinical- and cost-effectiveness.

Although data is available on public/governmental spending on healthcare (both through the Estimates process, public expenditure transparency systems like OSCAR and through NHS England's Board papers), there is no Government information on total expenditure on health administration (incorporating both health insurance and public spending).

There is a strict health budget defined annually by country and for different health services. Overall health spending for England and the overall block grants to the Scotland, Wales and Northern Ireland are fixed in advance in spending reviews. Based on the latest announcements in June 2018, a real terms increase of £20.5 billion will take place in NHS funding in England by the end of five years. This implies an average yearly increase in funding of 3.4 per cent in real terms. The funding will be

front-loaded, with an increase of £4.1 billion envisaged for 2019 (a steeper increase of 3.6% is planned in the first two years).

Role of private insurance and out of pocket co-payments

9.9% of the population buys duplicative private insurance (to cover the same services that are publicly provided/ funded). In 2015, private and out-of-pocket expenditure were 20.5% altogether and out-of-pocket alone represented 14.8% of total health expenditure, both below the EU average (21.6% and 15.9% in 2015).

Types of providers, referral systems and patient choice

As care provision is defined at country level, there are some differences between England, Wales, Scotland and Northern Ireland in the way care is purchased and delivered.

In England, NHS Trusts (Acute Trusts, Foundation Trusts, Ambulance Trusts, Mental Health Trusts, and Care Trusts) are responsible for providing care to all residents. Clinical Commissioning Groups (209) are the local organisations in charge of ensuring residents are provided much of secondary care. Indeed CCGs control the large majority of the NHS budget by commissioning secondary care for their local population through contracts with Trusts and other providers. Primary care, commissioned by NHS England⁽⁴²¹⁾, is provided by independent general practitioners (GPs), dentists, or opticians working mostly in private group practices. NHS walk-in centres provide primary care during out-of-office hours as they have longer opening hours than most independent GPs, while the NHS Choices website and NHS 111 phone line provide information on health, allowing people to conduct an initial disease assessment and find information on health providers. NHS Foundation Trusts in England (152) (a type of hospital with large autonomy and run by local managers, staff and the public) and NHS Trusts (88) provide outpatient specialist care and day case and inpatient hospital care. Trusts oversee NHS hospitals and specialist care centres. Some of these are regional or national centres for

⁽⁴²¹⁾CCGs are increasingly being delegated responsibility for this area.

more specialised care. The large majority of all acute care hospital beds are public. Private provision mostly relates to common, non-elective surgical treatments as well as dental and optical care. Salaried public hospital physicians are allowed to conduct private practice on a part-time basis but only under certain circumstances so as to reduce possible perverse incentives to reduce public sector activity and increase demand for their private practice.

Scotland, Wales and Northern Ireland have different models. In Scotland, 14 NHS Boards are responsible for the provision of health services by creating community health partnerships. Community health partnerships work with local authorities, clinical teams and the voluntary sector to support health improvement of local communities. In 2009, the Welsh Assembly launched a consultation to end the internal market in Wales and create a unified health system through the Public Health Wales National Health Service Trust. This resulted in the redesign of healthcare delivery in Wales. The twenty-two Local Health Boards who were responsible for commissioning health services for their residents were reduced to seven. The thirteen NHS Trusts that provided hospital care were reduced to three. In Northern Ireland, four Health and Social Services Boards are responsible for commissioning health services from a range of providers. Five (formerly nineteen) Health and Social Services Trusts are the main service providers.

The number of practising physicians per 100 000 inhabitants (279 in 2015) is below the EU average (344 in 2015) though showing a consistent increase since 2005 (239). The number of GPs per 100 000 inhabitants (79 in 2015) is just above the EU average (78 in 2015). On the contrary, the number of nurses per 100 000 inhabitants (790 in 2015) is below the EU average (833 in 2015), showing a consistent year-on-year reduction since the peak value of 1024 in 2005.

Changes in remuneration and wage increases have been used to attract licensed but not-practicing physicians back into the sector. In addition, authorities have hired foreign staff. They have used national procurement to have more GPs in areas where shortages were perceived. These suggest the need to continue a comprehensive human resources strategy to ensure that the skill

mix goes in the direction of a primary care oriented provision, which authorities wish to pursue, that training, recruitment and attracting licensed staff back into the sector can compensate for staff shortages and losses due to retirement. Staff supply is regulated in terms of quotas for medical students but not by speciality or in terms of the location of physicians, which may explain some of the disparities in staff availability across geographic areas. Current government policy focuses on increasing access to primary care by extending service opening hours to evenings and weekends.

Authorities have always strongly encouraged the use of primary care vis-à-vis specialist and hospital care. Patients are encouraged to register with a GP and there is a compulsory referral system to specialist and hospital care i.e. GPs are gatekeepers to most ⁽⁴²²⁾ specialist and hospital care. While choice of GP has been limited in the past, authorities (old and new) have made patient choice over primary care providers a priority and as a result patient choice of GP has been increasing though limited to a geographic area. Choice of specialist and hospital is allowed, and there is a large amount of information explaining to patients how to exercise their choice. From October 2014, GPs in England are able to register patients from outside of their practice area. Where they do so, they are not obliged to provide home visits, out of hours care. In these circumstances, responsibility for ensuring the patient has access to urgent care when away from the practice area, rests with NHS England.

The number of acute care beds per 100 000 inhabitants (287 in 2006, latest available value) seems to be below the EU average, compared to the EU level of 416 in 2009). Authorities indicate that while there are no shortages of non-acute care beds, patients may at times create bed-blockages in acute care while awaiting appropriate follow-up care contributing to lengthen waiting times for elective surgery. It is for the central government to plan the opening of new public hospitals, but there appears to be no regulation in terms of the number of beds, the provision of specific specialised services or the supply of high cost equipment capacity. This has, however, not contributed to excessive capacity in terms of beds or high-cost

equipment. Hospitals have autonomy to recruit medical and other health staff, while their pay scale is determined at national level.

Treatment options, covered health services

The basic benefit package is not explicitly defined but through clinical and cost-effectiveness assessments, the National Institute for Health and Care Excellence assesses some interventions, medical devices and pharmaceuticals on the grounds of their clinical- and cost-effectiveness.

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Primary care practitioners, grouped in primary care practices, are mostly independent contractors. Primary care practices are paid for a mix of capitation, additional funding for the provision of enhanced services, services related to preventive care, chronic disease management and patient satisfaction. For the provision of preventative care and patient satisfaction primary care practices are paid through the Quality and Outcomes Framework. This is a voluntary scheme in England, but the vast majority of practices in England take it up. It ensures that practices are rewarded for providing systematic quality of care for patients, not just for the number of patients on their list.

Outpatient and inpatient specialists working in the public sector are paid a salary but are also eligible to receive bonuses related to preventive care and chronic disease activities and targets.

Hospital doctor salaries are determined at hospital level. Private sector doctors are paid on a fee-for-service basis. Hospital doctors can carry out private professional services or fee-paying services, in line with the provisions governing the relationship between NHS work, private practice and fee-paying services in their terms and conditions of service. This means doctors are required to inform their clinical managers of any regular commitments in respect of private professional services or fee-paying activity. Where there is a conflict in scheduling work, NHS commitments must take precedence over private work.

⁽⁴²²⁾ There are some self-referring secondary services.

An NHS GP is free to operate a private practice with private patients if they wish to do so. There are heavy restrictions on a GP's ability to charge fees to their NHS registered patients, but there are exceptions for procedures outside the General Medical Services Contracts Regulations such as signing passport applications and holiday insurance claims which GPs can issue a charge for.

When looking at hospital activity, inpatient discharges per 100 inhabitants are below the EU average (12 vs. 16 in 2015) but day case discharges, on the contrary, are more than double the EU average (16,636 vs. 7,635 in 2015). The proportion of surgical procedures conducted as day cases (57.5%) is considerably above the EU average (almost twice the EU level of 32.3% in 2015) and indeed one of the EU highest. Overall hospital average length of stay (7.0 days in 2015) is slightly below the EU average (7.6 days in the same year). These figures suggest that hospital throughput/efficiency is overall very high.

The market for pharmaceutical products

The Drug Tariff sets out what NHS dispensing contractors will be paid for the drugs supplied. There are controlled price amendments (increases/decreases). There is a list of products that cannot be supplied by prescribers as well as a list of products which will only be reimbursed if the listed conditions are fulfilled. Authorities promote rational prescribing by physicians through treatment and prescription guidelines (NICE guidance on clinical and cost-effectiveness effects of interventions, making prescribing measures available for primary care. Information is also available via NICE in the British National Formulary (BNF) and the BNF for Children) complemented with monitoring of prescribing behaviour and education and information campaigns on the prescription and use of medicines.

These are coupled with pharmaceutical budgets. For example, CCGs commonly define local lists of recommended drugs which are considered sufficient to meet the needs of patients as cost-effectively as possible and prescribers (in the UK, nurses, pharmacists and other allied health professionals can, and have, trained to become prescribers) may be asked to justify prescribing outside the recommendations. There are also

prescribing advisers employed at various levels of healthcare organisations to encourage rational and cost-effective prescribing and reviewing prescribing behaviour. Some CCGs also run prescribing incentives schemes with GPs so that they receive a (modest) bonus if they use cost-effective clinically appropriate prescribing.

In England, patients pay a flat rate prescription charge for each item dispensed via an NHS prescription, unless one qualifies for exemption. There is an explicit generics policy although generic substitution cannot take place i.e. pharmacies are obliged to dispense the product prescribed by the doctor. However, prescribers are strongly encouraged to prescribe by their generic name for good professional practice (so pharmacists can provide the patient the cheapest product available) and for value for money reasons.

eHealth, Electronic Health Record

The Department of Health and Social Care published an Information Strategy (May 2012) which set out a ten-year framework for transforming information for health and care. Working with stakeholders DHSC are in the process of implementing this vision and making progress. A key commitment was to give patients online record access to their GP record by March 2015.

In England resources have been made available to help the service accelerate progress towards a fully integrated health and care service- over £500 million available to NHS trusts to accelerate progress to towards use of integrated digital care records by 2018, and over £100 million to support nurses, midwives and health visitors to make better use of digital technology in all care settings. In addition, in 2013, the government allocated £5.3 billion to support the transformation in integrated health and social care through the Better Care Fund.

NHS England's Business Plan 2014/15 - 2016/17 outlined that by March 2015 patients would be able to order repeat prescriptions online, book appointments online and have online access to GP records available in 95% of GP practices.

Health and health-system information and reporting mechanisms/ Use of Health Technology Assessments and cost-benefit analysis

A large amount of prescribing data is available, practice by practice, to prescribers and advisers to allow benchmarking and encourage improvement. There are also information and education campaigns directed at patients and cost-sharing to encourage a rational use of medicines on the patients' side. For many years, the DHSC published the share of generic prescribing as an indicator but the focus has now developed in one of making the best use of medicines. This is called Medicines Optimisation and it works to make sure that the right patient gets the right choice of medicine at the right time. The Medicines and Prescribing Centre (part of NICE) provides a wide range of material and training to promote good quality prescribing. Prescribing advisers also encourage generic prescription.

Within the Quality Outcomes Framework, an annual reward scheme, detailed information is provided in the form of indicators to assess the performance of each GP at the national level. Capturing GPs' performance is also GPOS (general practice outcome standards).

The HS Outcomes Framework includes a set of system performance indicators that contribute to the evaluation of the performance of NHS England in managing the health care sector so that it generates improvements in health outcomes.

Further measures to improve quality will include implementing a monitoring and evaluation system based on defined indicators. Major IT development plans include establishing a database for the insurance system, developing a personal identification system, improving remote diagnostics and telemedicine.

Healthy lifestyle and disease prevention activities have received a lot of attention mainly through programmes aiming at improving the health status and quality of life of the population.

Recently legislated and/or planned policy reforms

The NHS in England has undergone major changes in its core organisational and governance structure; most changes took effect on April 1 2013⁽⁴²³⁾. The Department of Health and Social Care (DHSC) is still responsible for strategic leadership of both the health and social care systems, but is no longer the headquarters of the NHS, nor will it directly manage any NHS organisations. This responsibility has shifted to the new organisation NHS England.

NHS England is responsible for:

- using its national remit to secure improvements in population health (variously improvements in NHS outcomes, and national priorities identified in the NHS Mandate);
- national commissioning of primary care (general practice, dentistry, community pharmacy, and ophthalmology) and specialised services;
- allocation of funds between services and to local Clinical Commissioning Groups;
- oversight of the activities of Clinical Commissioning Groups.

Primary care trusts (PCTs) and strategic health authorities (SHAs) have been abolished and new organisations, clinical commissioning groups (CCGs), were established. Primary care trusts (PCTs) used to commission most NHS services and controlled 80% of the NHS budget. On April 1 2013, PCTs were abolished and CCGs were established. All GP practices must now be a member of a CCG and the groups also include other health professionals, such as nurses. CCGs commission most services and can commission any service provider that meets NHS standards and costs. These can be NHS hospitals, social enterprises, charities, or private sector providers. However, they must be assured of the quality of services they commission, taking into account both National Institute for Health and Care Excellence (NICE) guidelines and the Care Quality

⁽⁴²³⁾For an overview of the most important changes see <http://www.nhs.uk/NHSEngland/thenhs/about/Pages/nhsstructure.aspx>; accessed November 1, 2013.

Commission's (CQC) data about service providers. A new regulator (Monitor) oversees and regulates these new arrangements⁽⁴²⁴⁾. As of January 2016 the vast majority of hospitals and other NHS trusts have become foundation trusts⁽⁴²⁵⁾; foundation trust will have more 'freedom' and a different structure than NHS trusts⁽⁴²⁶⁾.

In addition, local authorities are tasked to take on a bigger role, which is in line with the political aim of greater overall responsibility at the local level. Local authorities are intended to assume responsibility for budgets for public health. Health and wellbeing boards have duties to encourage integrated working between commissioners of services across health, social care, public health and children's services. With the aim to support the joint effort of NHS and local government in working around people, placing their well-being as the focus of health and care services, the Better Care fund created a local single pooled budget. A new organisation, Public Health England (PHE), provides national leadership and expert services to support public health.

The authorities have implemented a number of policies to control expenditure on pharmaceuticals. There are no separate pricing and reimbursement decisions for reimbursed medicines. The Pharmaceutical Price Regulation Scheme controls the price of branded medicines and the profits pharmaceutical companies can make on selling drugs to the NHS. If companies make too high a profit on NHS reimbursed drugs, they must either reduce the price or repay the NHS.

The 2014 Pharmaceutical Price Regulation Scheme (PPRS) was introduced on 1 January 2014. The scheme will provide assurance on almost all the branded medicines bill for the NHS. The bill will stay flat over the first 2 years of the scheme and will grow slowly after that. The

industry will make payments to the Department of Health and Social Care if NHS spending on branded medicines exceeds the allowed growth rate.

The NHS Long Term Plan, released in January 2019, sets out a clearly defined list of ambitions up to 2028 to ensure the NHS can successfully improve quality and respond to the challenges in the decade ahead. The delivery of this plan will be supported by an increased funding (3.4% yearly vs. the 2.2% average over the past five years) that will total £20.5 billion by the end of the next five years.

The priorities focus both on the service model, with increased emphasis on "out-of-hospital" care, integrated care, personalised care and patient empowerment supported by digital solutions, reduced pressure on emergency hospital services; on increasing prevention and reducing health inequalities; on increasing the quality of care and improving care outcomes; on supporting NHS staff; on expanding the use of digital solutions to increase the effectiveness of the whole system and, in general, by maximising efficient spending. By focusing on these priorities for improvement, the aim to deliver to its citizens a stronger start of life, higher quality care to tackle major health problems and better support for a healthy ageing.

Following the publication of the NHS Long Term Plan, Sustainability and Transformation Partnerships (STPs) and Integrated Care Systems (ICSs), which are groups of local NHS organisations working together with each other, local councils and other partners, will need to develop strategies to implement the national plan. Yearly strategic implementation plans will be available by April 2019, whereas five-year plans will be formulated by Autumn 2019.

Challenges

The analysis above shows that a range of reforms have been implemented in recent years, for example, to ensure access to a wide range of care, to improve the quality of care, to increase patient choice, to reduce waiting times, to increase activity and efficiency and to control pharmaceutical expenditure. They were to a large extent successful and the UK should continue to pursue them. The

⁽⁴²⁴⁾ For more information see <https://www.gov.uk/government/organisations/monitor/>; accessed April 12, 2019.

⁽⁴²⁵⁾ 101 foundation trusts out of 154 acute trusts; 43 foundation trusts out of 56 mental health trusts; 3 foundation trusts out of 37 community providers; 5 foundation trusts out of 10 ambulance trusts. <http://www.nhsconfed.org/resources/key-statistics-on-the-nhs/>; accessed March 2 2016.

⁽⁴²⁶⁾ For more details see <https://www.mcht.nhs.uk/members/what-is-a-foundation-trust/>; accessed April 12, 2019.

main challenges for the UK health care system are as follows:

- To continue increasing the efficiency of health care spending, promoting quality and integrated patient packages as well as a focusing on productivity and costs in order to avoid the mismatch between health care needs and resources and ensure consistency with a challenging overall budgetary framework, in view of the future projected increase in health care expenditure over the coming decades, due to population ageing and non-demographic factors.
- To continue to enhance primary care provision by increasing the numbers and spatial distribution of GPs and primary care nurses, investing more in training and developing options to increase retention as envisaged in the Forward View. Additional numbers of needed primary care staff can render the referral system to specialist care more effective and increase actual patient choice.
- To enact the commitment to remove the barriers between different healthcare providers so that care is shifted towards community settings, care is delivered in an integrated way and patients, especially those with chronic conditions, are increasingly empowered. Consistently, to shift resources from acute to primary and community services to strengthen and further develop community-based care.
- To reinforce the existing human resources strategy to tackle current shortages in staff, including in primary care staff, and ensure sufficient numbers of staff in the future in view of staff and population ageing.
- To continue to monitor the coherence of resource allocation to different types of care across geographic areas following devolution and decentralised commissioning of care to CCGs, to avoid possible variations in care availability and quality.
- To further the efforts to improve information in a number of areas and further introducing ICT and eHealth solutions to allow for nationwide electronic exchange of medical data (including patient electronic medical records) to support choice, reduce medical errors and increase cost-efficiency such that general practitioners, municipalities and hospitals work closely together to give citizens a coordinated package of treatment.
- To further enhance health promotion and disease prevention activities i.e. promoting healthy life styles and disease screening given the recent pattern of risk factors (diet, smoking, alcohol, obesity) in various settings (at work, in school).
- To ensure equal access to health promotion and disease prevention activities to help reducing health inequalities between UK countries and regions.

Table 2.28.1: Statistical Annex – United Kingdom

General context												EU- latest national data			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
GDP															
GDP, in billion Euro, current prices	2,027	2,147	2,245	1,975	1,717	1,842	1,884	2,078	2,064	2,279	2,602	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	30.9	31.1	30.8	29.5	26.7	27.4	27.1	27.5	27.4	27.9	29.1	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	2.3	1.8	1.5	-1.3	-4.9	0.9	0.6	0.8	1.4	2.3	1.5	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	3.7	4.5	2.0	4.9	-1.1	-1.0	1.4	16.5	1.7	2.7	3.7	0.2	0.2	4.1
Expenditure on health*															
Total as % of GDP	7.6	7.8	8.0	8.2	9.1	8.9	8.8	8.8	10.1	10.1	10.2	10.2	10.1	10.1	10.2
Total current as % of GDP	6.6	6.9	7.1	7.2	7.4	7.4	7.5	7.7	8.6	9.9	9.8	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	1.0	0.9	0.9	1.0	1.7	1.4	1.0	0.3	0.3	0.3	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	2,399	2,567	2,743	2,472	2,353	2,457	2,452	2,701	3,061	3,339	3,827	2,745	2,895	2,975	3,305
Public total as % of GDP	6.1	6.3	6.3	6.7	7.5	7.4	7.3	7.2	8.1	8.1	8.1	8.0	7.8	7.8	8.0
Public current as % of GDP	5.9	6.1	6.1	6.4	7.2	7.1	7.0	6.9	7.8	7.8	7.9	7.7	7.6	7.6	7.8
Public total per capita PPS	1,934	2,089	2,175	2,006	1,950	2,043	2,026	2,201	2,445	2,676	3,042	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.25	0.24	0.23	0.30	0.37	0.35	0.26	0.25	0.26	0.28	0.24	0.2	0.2	0.2	0.2
Public as % total expenditure on health	80.6	81.4	79.3	81.1	82.8	83.2	82.6	81.5	79.9	80.1	79.5	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	16.5	16.2	14.4	14.6	16.7	15.6	17.4	15.7	18.3	17.0	17.3	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	9.5	9.9	10.0	9.0	8.9	9.6	9.3	10.6	14.8	14.7	14.8	14.6	14.9	15.9	15.9
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.															
Population and health status															
Population, current (millions)	60.2	60.6	61.1	61.6	62.0	62.5	63.0	63.5	63.9	64.4	64.9	502.1	503.0	505.2	508.5
Life expectancy at birth for females	81.3	81.6	81.8	81.8	82.4	82.6	83.0	82.8	82.9	83.2	82.8	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.0	77.3	77.6	77.7	78.3	78.6	79.0	79.1	79.2	79.5	79.2	76.6	77.3	77.7	77.9
Healthy life years at birth females	65.5	64.9	66.0	66.3	66.1	65.6	65.2	64.5	64.8	64.2	63.3	62.0	62.1	61.5	63.3
Healthy life years at birth males	64.2	64.8	64.6	65.0	65.0	64.9	65.2	64.6	64.4	63.4	63.7	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	68	63	60	58	54	52	126	122	119	116	117	64	138	131	127
Infant mortality rate per 1 000 live births	5.1	4.9	4.7	4.6	4.5	4.2	4.2	4.0	3.9	3.9	3.9	4.2	3.9	3.7	3.6
Notes: Amenable mortality rates break in series in 2011.															
System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP															
Inpatient curative and rehabilitative care	1.8	1.8	1.8	1.8	2.1	1.9	1.9	1.9	2.3	2.3	2.3	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	0.5	0.5	0.5	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	2.4	2.4	2.5	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	:	1.2	1.2	1.2	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.3	0.3	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	:	:	:	:	:	:	:	:	0.5	0.5	0.5	0.3	0.2	0.3	0.3
Health administration and health insurance	:	:	:	:	:	:	:	:	0.3	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	2.2	2.2	2.2	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	0.4	0.4	0.4	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	2.1	2.1	2.1	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	:	0.8	0.8	0.8	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Prevention and public health services	:	:	:	:	:	:	:	:	0.4	0.4	0.4	0.2	0.2	0.2	0.3
Health administration and health insurance	:	:	:	:	:	:	:	:	0.1	0.1	0.1	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.28.2: Statistical Annex - continued - United Kingdom

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU - latest national data			
	2009	2011	2013	2015											
Inpatient curative and rehabilitative care	26.8%	26.5%	24.7%	25.2%	28.2%	25.9%	24.4%	21.8%	23.6%	23.5%	23.7%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	4.8%	4.9%	5.0%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	24.8%	24.8%	25.3%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	:	12.2%	12.0%	12.0%	13.1%	12.6%	14.7%	14.6%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	2.7%	2.7%	2.4%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	:	:	:	:	:	:	:	:	5.0%	5.1%	5.2%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	:	:	:	:	:	:	:	:	2.5%	2.4%	2.2%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	:	:	27.8%	27.7%	28.0%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	:	:	:	:	:	:	:	:	5.2%	5.3%	5.3%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	:	:	:	:	:	:	:	:	26.8%	26.9%	27.2%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	:	10.2%	10.1%	10.2%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	:	:	0.5%	0.5%	0.5%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	:	:	:	:	:	:	:	:	5.0%	5.0%	5.1%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	:	:	:	:	:	:	:	:	1.8%	1.7%	1.5%	4.1%	4.0%	3.6%	3.4%
Expenditure drivers (technology, life style)															
MRI units per 100 000 inhabitants	0.54	0.56	:	0.55	:	0.66	0.70	0.72	0.72	0.72	:	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	0.1	:	:	:	:	:	:	:	:	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	0.8	0.8	:	0.7	:	0.8	0.9	0.9	0.9	1.0	:	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	0.1	:	:	:	:	:	:	:	:	:	:	0.1	0.1	0.2	0.2
Proportion of the population that is obese	23.0	24.0	24.0	24.5	:	:	:	:	:	19.8	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	24.0	22.0	21.0	21.0	21.0	20.0	20.0	20.0	19.0	19.0	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	12.1	11.6	11.8	11.5	10.8	10.9	10.7	10.4	10.3	10.4	10.7	10.4	10.3	10.1	10.2
Providers															
Practising physicians per 100 000 inhabitants	239	245	249	258	267	272	276	275	277	279	279	324	330	338	344
Practising nurses per 100 000 inhabitants	1024	991	963	967	983	960	841	821	818	819	790	837	835	825	833
General practitioners per 100 000 inhabitants	72	73	73	75	79	80	81	80	80	80	79	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402
Outputs															
Doctors consultations per capita	5.0	5.1	5.0	5.9	5.0	:	:	:	:	:	:	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	13	12	12	13	13	13	13	12	12	12	12	17	16	16	16
Day cases discharges per 100 000 inhabitants	11,667	12,358	13,152	14,009	14,487	14,826	15,059	15,086	15,607	16,155	16,636	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	84.0	83.0	83.7	84.8	84.2	84.4	:	:	:	:	:	77.1	76.4	76.5	76.8
Hospital average length of stay	6.9	6.6	8.1	8.0	7.8	7.7	7.3	7.3	7.2	7.1	7.0	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	:	50.2	51.7	:	53.2	53.9	54.6	54.8	55.8	56.6	57.5	28.0	29.1	30.9	32.3
Population and Expenditure projections															
Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps.		
AWG reference scenario	7.9	8.1	8.2	8.4	8.6	8.8	8.9	9.1	9.2	9.2	9.3	9.4	UK	EU	
AWG risk scenario	7.9	8.1	8.4	8.7	9.0	9.3	9.6	9.8	10.0	10.1	10.2	10.3	2.4	1.6	
Note: *Excluding expenditure on medical long-term care component.															
Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in %		
Population projections until 2070 (millions)	65.4	67.2	69.5	71.6	73.4	75.0	76.4	77.6	78.5	79.3	80.1	81.0	UK	EU	
													23.8	2.0	

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3. LONG-TERM CARE SYSTEMS

3.1. AUSTRIA

General context: Expenditure, fiscal sustainability and demographic trends

Austria, federal republic consisting of nine states (“*Bundesländer*”) has a population of about 8.6 million inhabitants, which accounts for slightly more than 1.7% of the EU population in 2016, which is projected to reach 10.2 million by 2070⁽⁴²⁷⁾. With a GDP of about €340 billion (2015), or 34,230 PPS per capita, it is also among the richest EU member states (EU average 29,610). Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part)⁽¹⁾ is with 1.9% of GDP in 2016 above the EU average in the same year (1.6%).

Health status

Life expectancy at birth for both women and men in 2015 was 83.7 and 78.8 years and lies above the EU average values (83.3 and 77.9 years respectively in 2015). Nevertheless, the healthy life years at birth, 58.1 years for women and 57.9 years for men, are well below the EU-average (63.3 and 62.6 respectively)⁽⁴²⁸⁾. The percentage of the Austrian population having a long-standing illness or health problem is slightly above, though broadly in line with the figures for the EU as a whole (34.8% vs EU 34.2% respectively). The percentage of the population indicating a self-perceived severe limitation in their activities of daily living has been slightly decreasing in the last few years, from 10.2 in 2007 to 9.2 in 2015, but is still higher than the EU-average of 8.1%.

Dependency trends

The number of people depending on others to carry out activities of daily life is projected to increase significantly over the coming 50 years. From 0.81 million residents living with strong limitations due to health problems in 2016, an increase of 49% is envisaged by 2070 to reach around 1.22 million. That is a steeper increase than in the EU as a whole (25% on average across the EU). Also as a share of the population the dependents are becoming a bigger group, going from 9.3% to 12.0%, an increase of 28%, slightly higher than the EU average (EU: 21%).

⁽⁴²⁷⁾ Based on Eurostat projections.

⁽⁴²⁸⁾ Figures in this section have been extracted from Eurostat.

Expenditure projections and fiscal sustainability

With the demographic changes, public expenditure on long-term care as a percentage of GDP is projected to steadily increase. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.9 pps of GDP by 2070 (going from 1.9% to 3.8%), an increase of 100% well above the EU average of 73%⁽⁴²⁹⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.4 pps of GDP by 2070, an increase of almost 180%, slightly higher than the EU average of 170%. Overall, the projected long-term care expenditure increase is expected to add to budgetary pressure. Over the long run, medium sustainability risks appear for Austria. These are primarily related to the strong projected impact of age-related public spending (mainly healthcare and long-term care)⁽⁴³⁰⁾.

System Characteristics

The Austrian federal constitution attributes public responsibilities in social care to both the federal republic and to the nine states. According to the constitution, the federal republic is responsible for developing the framework legislation relating to social welfare and nursing homes, whereas defining the specific measures within the broader framework, implementing and executing laws is defined as a competence of the states (art. 12 B-VG).

According to the Agreement between the Federal Government and the states, in accordance with Art. 15a B-VG on common measures of the Federal Government and the states for dependent persons, BGBl. No 866/1993, the Parties agree, on the basis

⁽⁴²⁹⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁴³⁰⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

of Austria's federal structure, that provision for persons reliant on care throughout Austria should follow identical aims and principles. This agreement obliges the states to provide a minimum standard of long-term care services such as mobile care services, residential care facilities, part-time care services, short-term care services in residential care facilities and case & care management.

Types of care

The system of care provision is mainly based on three pillars. The first pillar provides the care allowances, the second pillar consists of the care services and the third pillar consists of measures to support carers.

Cash benefits As from the beginning of 2012 long-term care cash benefits ("*Pflegegeld*"), originally introduced in 1993, fall within the sole competency of the federal republic. The benefit currently amounts to €157.30 per month in level 1 (the lowest level), but it may be as high as €1,688.90 in level 7 (the highest level) ⁽⁴³¹⁾. These cash benefits are intended to be used to buy formal care services from public or private providers or to reimburse informal care provision. However, it is not being controlled for what purposes long-term care benefits are actually used by the benefit recipients.

In-kind care The types of in-kind care provided range from proper institutional care to hybrid forms of short-term institutional care and semi-institutional care. Institutional care is typically provided in ad-hoc institutions such as nursing care homes and supervised residential communities for the elderly. There are forms of short-term institutional care, within the same settings but for a maximum time of three months, conceived to offer support or a back-up to family carers who provide care at home. For patients who are not based in residential facilities, semi-inpatient care offers half-day or full day support (care and social care) including transportation to the care facility. Lastly, there are forms of long-term care delivery, outpatient/mobile care, offering

home help and or nursing depending on the individual need ⁽⁴³²⁾.

As far as expenditure is concerned, based on available figures, the focus on in-kind services seems to be slightly above the average, with 89.8% of total long-term care spending against 84.4% for the EU in 2016. Conversely, the proportion of the long-term care budget spent on cash benefits seems to be below average for the same year, with 10.2% against 15.6% for the EU. Combined with the relatively low unit costs per capita as a share of GDP per capita, this suggests that shifting more resources to cash allowances, where appropriate, may increase cost-efficiency.

Measures to support family carers Currently, there are a large number of options to support family carers, including by improving compatibility between care and work, such as:

- carer's leave and part-time working arrangements, the entitlement to a carer's leave allowance;
- financial contributions towards the cost of substitute care in case of unavailability of the primary caregiver;
- social insurance for family carers;
- advisory services to citizens provided by the Ministry of Social Affairs;
- counselling for family members;
- measures under the strategy for dementia;
- young carers;
- visits within the framework of quality assurance in home care.

24-hour care Under the initiative of the Ministry of Social Affairs, a legal framework for quality-assured 24-hour care was established and a corresponding subsidy scheme was developed in 2007. According to this scheme, caring in private

⁽⁴³¹⁾ Source:

https://www.sozialministerium.at/site/Pension_Pflege/Pflege_und_Betreuung/Hilfe_Finanzielle_Unterstuetzung/Pflege_geld/#intertitle-3 (accessed on 19/03/2019).

⁽⁴³²⁾ Fink, M. (2018). ESPN Thematic Report on challenges in long-term care, Austria, 2018, Report to the European Commission, DG EMPL, via the European Social Policy Network (ESPN).

homes can be regulated as self-employed or employed work. 24-hour home-care is an essential tool for people in need of care and their families to ensure a legitimate, quality-assured home care. In accordance with Section 21b of the Federal Long-Term Care Act, the Ministry of Social Affairs has developed a model that finances benefits for dependents and their family members. Provided the conditions for funding are met ⁽⁴³³⁾ in accordance with the Home Care Act (*Hausbetreuungsgesetz*), a maximum amount of €550 per month (when two self-employed carers are deployed) or €1,100 per month (when two employed carers are deployed). The responsibilities in the financing of this scheme are split between the federal government, financing 60%, and the states, responsible for 40%.

Long-term care fund In the field of long-term care the Federal Government plays a major role in securing funding to support regional governments to cover expenditure for long-term services and facilities, alongside supporting the provision of benefits.

In 2011, the long-term care fund was introduced by the Ministry of Social Affairs and was followed by an amendment of the care-fund in August 2013. The purpose of grants from the fund is to ensure the provision and sustainability of long-term care services, which are provided by states and municipalities in cooperation with non-profit

⁽⁴³³⁾ In order to obtain financial support for 24 hour care, the following conditions have to be fulfilled:

- A need for (up to) 24-hour care
- Receipt of long-term care benefit at Stage 3 or higher
- Existence of a care relationship (i.e. a formal or informal contract) between a carer and the person in need of care or a family member, or a contract between either of these persons and a non-profit organisation offering care services
- Carers need to be able to prove that they have either completed a theoretical training course (which is essentially the same as that for a home help), or have cared for the person applying for the subsidy in a proper manner for at least six months. Alternatively, the carer must possess official authorisation for carrying out care work or nursing work. There are also income thresholds for entitlement set at €2,500 net per month, excluding benefits. Assets are not taken into account. Increases of €400 for every family member who is dependent or entitled to maintenance, and by €600 for family members who are disabled and entitled to maintenance are established. https://www.sozialministerium.at/siteEN/Pension_Nursing/Long_term_Care_Benefit/24_hour_care.

organisations. The long-term care-fund sets priorities for nationwide expansion of mobile services and is primarily used for non-stationary ⁽⁴³⁴⁾ services. The majority, i.e. two thirds, of the long-term care-fund is financed by the federal republic and one third by the states and the municipalities. Between 2011 and 2016 a total amount of €1.335 billion had been transferred to this purpose.

In January 2017 the long-term care-fund was extended from 2017 to 2021 and increased up to a total of €1,914 million. The amendment introduced an expenditure path following the model of the health reform, which sets a maximum of 4.6% for the annual percentage increases in the total gross expenditures of all states in the area of long term care provision. Additionally €8 million per year is dedicated to the expansion of hospice and palliative care for 2017-2021.

Role of the private sector

Provision of social care is not exclusively managed by public entities and social care services can be offered by other organisations as long as they are suitable to the needs of dependent people and they are cost-effective. Hence, Austria has a mix of public and private providers, with services provided by municipalities and both for-profit and non-profit organisations of the so-called intermediary sector, i.e. social NGOs of different types. The role of the private sector is non-negligible, with more than 50% of residential care and nursing homes run by private organisations back in 2008. Accordingly, cash benefits can be used to buy formal care services from public or private providers or to reimburse informal care giving.

Eligibility criteria and user choices: dependency, care needs, income

In the Austrian long-term care system no definition of “need of care” exists, but eligibility requirements for cash allowances could be seen as a partial substitute for such a definition. The assessment of the need for long-term care is rather based on individual requirements for personal services and assistance. The need for both personal services and assistance is necessary in order to

⁽⁴³⁴⁾ Non-inpatient.

qualify for federal or provincial long-term care allowances.

Needs assessment is based on a doctors' expert opinion. Representatives of other fields (e.g. nursing) are also involved for an extensive assessment of the situation. The expert opinion is usually drawn up after an examination at home. It is possible for a trusted third party to be present during the examination, if desired by the person applying for long-term care allowance. The eligibility decision is made by means of an official notification with the possibility to appeal against this decision at the appropriate Labour and Social Court. The examination, the classification, as well as the payment of the long-term care allowance, are carried out by social insurance institutions, specifically pension insurance and accident insurance.

The specific provisions regarding the assessment of need of care are laid down in an ordinance. This ordinance defines care and assistance and the time allotted to individual tasks, e.g. dressing and undressing, care of the body, preparation of food, feeding as well as mobility assistance. In addition to that, the Main Association of Austrian Social Security Institutions⁽⁴³⁵⁾ has the right to define national guidelines for assessing needs of care. Such guidelines were issued and updated several times in order to assure the uniform interpretation of the respective laws also in practice and over different decision makers.

Co-payments, out of the pocket expenses and private insurance

Access to long-term care benefits in-kind and services is in principle not free of charge and users need to pay a co-payment. Where own resources and cash benefits were not sufficient to cover the expenses, the cost difference is compensated by states and municipalities. Here, means-testing applies, whereby all kinds of personal income are taken into account, including long-term care cash benefits and except for assets, due to the recent abolition of recourse to personal and family assets to finance inpatient long term care (Pflegerregress).

⁽⁴³⁵⁾

<http://www.hauptverband.at/cdscontent/?contentid=10007.754040>.

Long-term care cash benefits are granted without means-testing (against income or assets) and based on care needs categorised in seven different levels of need.

Social services can be provided by entities under private law. Persons in need of care may be requested to make contributions to the costs of social services but the social aspects have to be taken into consideration in assessing the share to be borne by them. Thus, there is in general some kind of means testing regarding social services, but the concrete form differs by state.

eHealth

The Federal Ministry for Labour, Social Affairs and Consumer Protection, has commissioned the computer application "PFIF Pflegegeldinformation" used by the Main Association of Austrian social insurance institutions. With the introduction of PFIF the existing system has been strengthened and upgraded. This application provides a valuable tool to improve the situation for dependent people and their families, by monitoring the overall process of all care allowances in Austria, including application and payment, as well as by providing comprehensive statistical evaluation of available options. In addition, this database is constantly updated to account for changes to the existing legal framework.

In order to enhance the transparency, validity and comparability of the data in terms of care and long-term care and to increase the quality of care supply, a national long-term care database "Pflegedienstleistungsdatenbank" was launched at the beginning of July 2012 by the Austrian Federal Statistics Office, on behalf of the Ministry of Social Affairs. This is based on the 2012 legislation on care-services related statistics (BGBl. II No 302/2012). This database covers all long-term care services including mobile, semi-residential and residential care services for elderly and dependent population.

Formal/informal caregiving

Most persons in need of care prefer staying in the private environment and receiving informal care from relatives or family members over formal care. Consequently, roughly 80% of persons in need of

care do receive informal care. By providing the cash allowance irrespective of the chosen care setting (formal/informal, institution/home based), the philosophy of the system again is one of supporting the possibility of individual choice.

Recently legislated and/or planned policy reforms
The Working Group on Long-term Care Reform, established by the government to deal with respective problems and to develop a strategy for the future, suggested inter alia introducing a care leave or part-time care leave for care-giving close relatives. This care leave has the aim to support working relatives during the first stage of care to better coordinate work and care.

The care leave and part-time care leave was implemented in 2014, the provisions in the Federal Long-term Care Allowance Act ("*Bundespflegegeldgesetz*") entered into force on January 1, 2014. Since then workers can take care leave or part-time care leave waiving income from employment in order to care and nurse family members in need of care. Persons can also take family hospice leave or part-time family hospice leave for the purpose of nursing a dying close family member or a seriously ill child.

These family members can, under certain conditions, claim care leave benefits (certain level of long-term care benefit of the family member in need of care, employment contract in place since at least three months - comprehensive insurance). A close family member may receive care leave benefits for one to three months during care leave or part-time care leave, depending on the period of leave agreed with the employer. If the level of the long-term care benefit is raised, employer and employee may agree on one single additional period of care leave or part-time care leave. In case of family hospice leave for the purpose of nursing a dying close family member (a long-term care benefit is not required in this case) the care leave benefits can be drawn for up to six months (typically three months with the possibility of prolongation up to six months). In case of family hospice leave for the purpose of nursing a seriously ill child (a long-term care benefit is not required in this case), the care leave benefits can be drawn for up to nine months (typically five months with the possibility of prolongation up to nine months).

The rate of care leave benefits is income-related and approximately equal to the rate of unemployment benefits (55 % of the daily net income) plus children's allowance.

The situation of care-giving relatives has been evaluated in the context of the quality assurance of home care and the results show that relatives often indicate emotional stress because of their caring responsibilities and should therefore be supported as much as possible. After pilot testing, the initiative "dialogue with relatives" has been established. To support family carers, psychologists or professional social workers provide free counselling services, offering advice and psychological support to prevent any health consequence due to mental stress.

It is estimated that between 115,000 and 130,000 people in Austria are currently living with some form of dementia. Due to population ageing and increasing life-expectancy the number of people suffering from dementia is expected to increase. Accordingly, the Federal Government assigned a high priority to the development of a dementia strategy "*Demenzstrategie*".

The first step towards the strategy was the 2014 report on dementia, "*Österreichischer Demenzbericht 2014*", based on research carried out by the Austrian Public Health Institute (Gesundheit Österreich GmbH), on behalf of the Ministry of Social Affairs and the Ministry of Health. The report covers the status quo as regards the situation of people with dementia impairments and contains epidemiological key messages on the prevalence of dementia in Austria.

The technical work has been carried out by six working groups in a participative process, emphasising the importance of a common cross-policy approach in long-term care. Representatives of the provincial, municipal and local federations, social security institutions, scientific community, key stakeholders, developed recommendations targeting those seen as key issues.

A total of twenty one recommendations reflect seven main targets:

- involvement and empowerment of those affected;

- developing wide and target-group specific information;
- developing knowledge and enhancing skills;
- uniforming conditions;
- ensuring availability of dementia care;
- developing coordination and cooperation;
- quality assurance and improvement through research.

In 2015 the report by the experts “*Demenzstrategie — Living well with dementia*” was presented to the public and the implementation has started.

The future of long-term care has gained increased political attention in Austria over the last few years. To deal with respective problems and to develop a strategy for the future, the above-mentioned Working Group on Long-term Care Reform suggested taking into account an amendment of the Act on Long-term Care Funds, which was adopted in 2013.

Overall, these developments do not point towards a structural change of the main features of the Austrian long-term care system. The aim appears to be to safeguard financial sustainability in view of rising demand (and without reduced accessibility). Within this context, the Reform Working Group rejected the idea of a separate contribution-financed long-term care insurance and clearly stated that long-term care services should remain tax-financed. Furthermore, the currently existing model of a combination of universal cash benefits and (means-tested) long-term care services administered by the states and municipalities has not been put into question. It is, however, the declared aim to do more to harmonise the access to available services, to focus on the further development of mobile/outpatient services (also for reasons of cost containment) and to promote innovative approaches.

Negotiations on the budget redistribution between the federal government and the states, including in the area of long-term care, led to the extension of the long-term care-fund from 2017 to 2021, to

reach a total of €1,914 million (with an increase of 4.5% per year starting from 2018).

On 29 June 2017 the Austrian Parliament passed a Constitutional Provision (Verfassungsbestimmung), prohibiting recourse to the assets of people in inpatient long-term care (so-called *Pflegeregress*)⁽⁴³⁶⁾. The recently voted Constitutional Provision (amending sections §§ 330a, 330b and 707a of the General Law on Social Insurance/ASVG) prohibits recourse to the assets of persons living in inpatient long-term care facilities, as well as recourse to the assets of their relatives, heirs or gift-recipients, to cover costs for long-term care otherwise to be borne by Social Assistance.

Since then, compensation claims may no longer be asserted; ongoing proceedings are or were to be discontinued. Insofar as provincial laws precluded this, the relevant provisions expired on 1 January 2018. In order to cover the revenues which the states are now facing because of the new regulations, the Federal Minister of Finance has to provide at least 100 million euros from the general federal budget annually. Due to the “*Verbot des Pflegeregresses*”, the special subsidy law (*Zweckzuschussgesetz*) has been adopted on 21 December 2018⁽⁴³⁷⁾. This is intended to create a legal basis that will enable the federal government to provide the states with further 240 million euros for the year 2018 as compensation for the effects of the ban of the *Pflegeregress* in accordance with § 330a ASVG. The maximum sum of 340 million Euros will be evaluated in the first half of 2019, to get a baseline for a settlement for the following years.

⁽⁴³⁶⁾In Austria, up to now, it had been in principle the individual in need of long-term care who was responsible for financing his/her stay in a residential or nursing home. Personal income used for this purpose typically consisted of a retirement pension plus “long-term care cash benefit” (*Pflegegeld*). Furthermore, personal assets (such as savings or real estate) had to be used for financing inpatient long-term care before the respective provider of Social Assistance (*Sozialhilfe*) steps in to bear uncovered costs. This long-term care recourse-to-assets was then subject to specific regulations in each of the nine states (*Bundesländer*), which are responsible both for long-term care services and for Social Assistance.

⁽⁴³⁷⁾ <https://www.parlament.gv.at/PAKT/VHG/XXVI/I/00327/index.shtml>.

Another possible future policy challenge are care-giving children and adolescents ('young carers'). Care-giving children are a social phenomenon, which was given little credit so far. In December 2012 the results of a study, which was financed by the Federal Ministry of Labour, Social Affairs and Consumer Protection, were published under the title "Children and Adolescents as informal caregivers; an inside look into the past and present situation of young carers in Austria". This study, which was carried out by the Institute for Nursing Science, shows for the first time figures about how many care-giving children exist in Austria and on the other hand also shows the way and frequency of assistance by these children. According to this study there are 42,700 care-giving children and adolescents between the age of 5 and 18 in Austria.

Building on the results of the previous study, raising awareness on young carers, a follow-up study "Children and young people as family carers: insight on the condition and possible support measures" was carried out in 2014 ⁽⁴³⁸⁾. This study developed a basic framework focused on young carers (e.g. the need to support young carers, information and advice, expert views, resources) as well as with focus on their family (coordination of assistance within the family.). This study provides evidence on which particular programmes can be applied to support young carers and their families and it serves as guidance for those institutions intending to implement support programmes in this area.

In the years 2017 and 2018 a study on Family care in Austria was carried out by the Department of Nursing Science in cooperation with the Department of Sociology (University of Vienna) commissioned by the Ministry of Labour, Social Affairs, Health and Consumer Protection. The study examines the situation of caregiving relatives and the development of informal care networks.

With the long-term care Master Plan adopted by the Council of Ministers on 5 December 2018, another step was taken to tackle this important future challenge. Ensuring adequate and high-quality care according to the state of nursing science and medicine as well as the support of

people in need of care and their relatives have the highest priority in Austria. By the end of the year 2019 a comprehensive concept based on the masterplan will be developed. The master plan addresses the following topics:

- control/organisation;
- caring relatives;
- caregivers;
- digitalisation;
- financing.

Challenges

Austria has a relatively fragmented system of long-term care, with unequal coverage across regions and a large provision of informal care that is privately financed. The main challenges of the system appear to be:

- **Improving the governance framework and increase administrative efficiency:** to strengthen the existing legal and governance framework for a clearer delineation of responsibilities of states with respect to the provision of long-term care services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes.
- **Improving financing arrangements:** to foster pre-funding elements, which implies setting aside some funds to pay for future obligations.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC

⁽⁴³⁸⁾

http://www.studienreihe.at/cs/Satellite?pagename=Z02/index&n=Z02_0.

coverage schemes, setting a homogenous need-level triggering entitlement to coverage and the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage.

people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

- **Continue to encourage home care and to support family carers** to continue to monitor and evaluate alternative services, including incentives for use of alternative settings; to strengthen policies for supporting informal carers, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care; to improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers; to increase the retention of successfully recruited LTC workers, by improving the pay and working conditions of the LTC workforce, training opportunities, more responsibilities on-the-job, feedback support and supervision.
- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC.
- **Changing payment incentives for providers:** to consider a focused use of budgets negotiated ex-ante or based on a pre-fixed share of high-need users.
- **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of

Table 3.1.1: Statistical Annex – Austria

GENERAL CONTEXT														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2011	EU 2013	EU 2015
GDP and Population														
GDP, in billion euro, current prices	254	268	284	294	288	296	310	319	324	333	344	13,213	13,559	14,447
GDP per capita, PPS	32.5	33.4	34.0	33.6	31.4	32.2	32.9	33.8	33.3	33.4	34.2	28.1	28.0	29.6
Population, in millions	8.2	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.5	8.6	503	505	509
Public expenditure on long-term care (health)														
As % of GDP	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	394.5	417.5	420.7	430.6	438.8	283.2	352.1	373.6
As % of total government expenditure	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.3	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts														
Health status														
Life expectancy at birth for females	82.2	82.8	83.1	83.3	83.2	83.5	83.8	83.6	83.8	84.0	83.7	83.1	83.3	83.3
Life expectancy at birth for males	76.6	77.1	77.4	77.7	77.6	77.8	78.3	78.4	78.6	79.1	78.8	77.3	77.7	77.9
Healthy life years at birth for females	60.1	61.0	61.4	59.9	60.8	60.8	60.1	62.5	60.2	57.8	58.1	62.1	61.5	63.3
Healthy life years at birth for males	58.2	58.7	58.7	58.5	59.5	59.4	59.5	60.2	59.7	57.6	57.9	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	21.9	23.9	32.3	31.8	34.8	34.1	33.1	34.5	35.8	34.8	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	9.4	10.2	10.3	9.7	9.5	9.7	9.6	9.7	9.8	9.2	8.3	8.7	8.1
SYSTEM CHARACTERISTICS														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)														
Number of people receiving care in an institution, in thousands	:	:	19	42	66	89	91	93	74	75	77	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	87	116	145	174	177	179	166	168	171	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.3	1.9	2.5	3.2	3.2	3.2	2.8	2.9	2.9	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients														
Providers														
Number of informal carers, in thousands	:	290	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	58	61	66	67	64	64	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.1.2: Statistical Annex - continued – Austria

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	8.7	9.0	9.7	10.1	10.2	10.2	10.2	16%	2%
Dependency									
Number of dependents in millions	0.81	0.85	0.97	1.07	1.17	1.19	1.22	49%	25%
Share of dependents, in %	9.3	9.4	10.0	10.6	11.4	11.7	12.0	28%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.9	2.0	2.3	2.6	3.2	3.6	3.8	101%	73%
AWG risk scenario	1.9	2.0	2.5	3.0	3.9	4.6	5.3	178%	170%
Coverage									
Number of people receiving care in an institution	90,721	96,029	117,209	138,489	171,718	186,788	194,537	114%	72%
Number of people receiving care at home	174,506	185,519	222,102	260,109	308,505	326,460	340,764	95%	86%
Number of people receiving cash benefits	465,342	498,105	605,641	719,119	866,740	925,118	968,725	108%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	8.4	8.6	9.7	11.1	13.1	14.1	14.8	77%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	89.8	91.2	97.9	100.0	100.0	100.0	100.0	11%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	89.8	89.8	90.0	90.0	90.3	90.6	90.8	1%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	10.2	10.2	10.0	10.0	9.7	9.4	9.2	-10%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	70.6	70.6	70.9	71.1	71.8	72.4	72.3	2%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	29.4	29.4	29.1	28.9	28.2	27.6	27.7	-6%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	115.8	117.3	120.3	122.1	124.0	128.3	131.0	13%	10%
Unit costs of home care per recipient, as % of GDP per capita	25.0	25.3	26.1	26.4	27.0	28.0	28.6	14%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	3.6	3.6	3.7	3.7	3.7	3.7	3.7	1%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.2. BELGIUM

General context: Expenditure, fiscal sustainability and demographic trends

Belgium has a population of just over 11 million inhabitants. According to the base Eurostat scenario this number will grow to reach 13.9 million by 2070, an increase of 23%, well above EU average for the same period (2%).

With a GDP of €410 bn, or 32,170 PPS per capita in 2015, it scored above the EU average of 29,610 PPS for the same year. With public expenditure on long-term care (health and social) ⁽⁴³⁹⁾ of 2.3% of GDP in 2016, Belgium spent almost 1.5 times as much as the share of GDP of the EU average (1.6% in the same year).

Health status

Life expectancy at birth for women and men is respectively 83.4 and 78.7 years and it is broadly in line with the EU average, though slightly above for males (83.3 and 77.9 years respectively for the EU in 2015). The healthy life years at birth are 64.0 years for women and 64.4 years for men, slightly higher than the EU-average (63.3 and 62.6 respectively). The percentage of the Belgian population having a long-standing illness or health problem is significantly lower than in the EU as a whole (24.6% and 34.2% respectively in 2015). On the contrary, the percentage of the population indicating a self-perceived severe limitation in its daily activities has been fluctuating over the last few years, and the latest available figure is slightly higher than the EU-average (8.6% against 8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living is expected to increase significantly over the coming 50 years. From 940 thousand residents living with strong limitations due to health problems in 2016, an increase of 42% is projected up to 2070 to around 1.33 million. That is a steeper increase than in the EU as a whole (EU 25%). Also as a share of the population the dependents are projected to become a bigger group, going from 8.3% in 2016 to 9.6% in 2070.

⁽⁴³⁹⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

However, the increase in this case is less steep than EU average, with a projected 15% against a 21% projected increase for the EU.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is projected to steadily increase. In the "AWG reference scenario", public long-term care expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.7 pps of GDP by 2070, bringing Belgium from 2.3% to 4.0% of GDP. This represents an increase of 73%, which is in line with the EU average ⁽⁴⁴⁰⁾. The "AWG risk scenario", which in comparison captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.5 pps of GDP by 2070. This increase of 150% is higher, but below the EU average of 170%. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure. There are high medium-term fiscal sustainability risks, with the indicator S1 at 4.3 pps of GDP, primarily related to the high level of government debt and the projected ageing costs, which contribute 3.1 and 1.2 percentage points of GDP respectively to the indicator. Over the long-term, fiscal sustainability risks are high as well, with the indicator S2 is at 4.3 percentage points of GDP driven by the projected ageing costs, contributing 3.5 percentage points of GDP, primarily related to pensions and long-term care expenditure ⁽⁴⁴¹⁾.

System Characteristics

Long-term care is part of an integrated system of health care, complemented by social service provision. Not unique to Belgium, long-term care is approached as a mix of different services and

⁽⁴⁴⁰⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁴⁴¹⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

measures, funded through different sources and organised at different levels.

The organisational landscape of long-term care provisions is fragmented because of a division of competencies between the Federal Government (responsible for medical care through the health care system) and the Communities (responsible for non-medical care). One level further down in the organisational landscape, cities and municipalities have a responsibility as far as the financing of the construction of residential facilities are concerned (with financial support from the Communities in the form of investment subsidies).

At the same time it must be mentioned that there is no specific federal legislation relating to long-term care. The legislative framework is the same as the one that applies to the health care system. Regulations at community level deal with a wide range of aspects of provision of long-term care services, such as the recognition of providers, the integration of services and the monitoring of quality.

Policy aims at supporting dependent older persons in their home environment for as long as possible. Should limitations in activities of daily living become too severe and adequate informal or professional support at home not be available or sufficient, dependent persons should have access to suitable and affordable residential care facilities.

Types of care

There are many different long-term care benefits in kind. Although formally not part of long-term care, it is worth mentioning that medical services are organised and paid for by the federal health insurance system, while more personal care is organised and paid for on a regional level. How these services are provided depends on the specific care setting.

The structure of long-term care in Belgium has a strong focus on in-kind services, accounting for 99.7% of total public spending in 2016. This is well above the EU average for the same year, at 84.4%. This also implies that the role of cash benefits is compressed with respect to other EU member states, with 0.3% of total public spending on long-term care against the EU average of 15.6% for the same year. This, combined with the fact

that unit costs of cash benefits measured as a share of GDP per capita are relatively cheaper, suggests that there may be scope to increase the focus on cash benefits and gain in terms of cost-efficiency. Out of in-kind spending, a relatively low share goes to institutional care. This accounted for 56.3% in 2016 against the EU average of 66.3%. However, the unit costs of institutional care as a share of GDP per capita appear to be comparatively high, with an above average value of 102.5 against 77.1 for the EU in 2016. Looking at the same indicator for home care, standing at 20.4 (below the EU average of 33.9 in the same year, suggests that home care may be directed only at cases with very low long-term care needs. Therefore it may be the case that the system may gain in terms of cost efficiency or level of care through a stronger focus on home care, though currently this already represents a higher share of in-kind spending than it is for the average (43.7% vs. 33.7 for the EU in 2016).

Home care includes medical care and non-medical services. Medical home nursing care, which consists of services such as wound dressing and drug administration, is provided as part of the social security scheme and is currently reimbursed at the Belgian Federal level through the National Institute for Health and Disability Insurance (NIHDI). Non-medical home care services are regulated and organised by the Communities. These services include help with personal care tasks (e.g. help with eating or moving around, hygienic help) along with instrumental help (e.g. light housework, preparing meals). The services offered under the health insurance scheme and those provided for by the Communities partially overlap.

Since 2002 service provision entities have been set up both in Flanders and in the French community to make sure that all disciplines involved in the care for patients for a specific geographical area are provided in a coordinated manner. Care support and coordination is geared towards keeping patients at home for as long as possible.

In centres for day care and “short-stay” care, nursing care and personal care are provided to elderly persons for whom home care is temporarily unavailable. This is meant for people who do not need intensive medical care but who require care or supervision and aid in the activities of daily

living. A fixed daily compensation (depending on the severity of the limitations) is paid by the compulsory health insurance.

A residential home for the elderly is a home-replacing environment where the medical responsibility rests with a general practitioner. The cost of stay is paid by the occupant, while medical costs and the cost of care are taken by the compulsory health insurance scheme based on an objectively assessed degree of care needed.

Patients with moderate to severe limitations, but who do not need hospital treatment, are admitted in nursing homes. Legislation requires each nursing home to have a coordinating and advisory physician who is responsible for the coordination of pharmaceutical care, wound care and physiotherapy.

Each nursing home must always have a functional link with a hospital. They must cooperate with the geriatric service of the hospital and a specialised service of palliative care. While residents must finance the cost of stay themselves, nursing care is reimbursed by the compulsory health insurance.

Role of the private sector

Many who make use of home care services pay for this by using “service coupons”. “Service coupons” were introduced in 2003 as a system of consumer subsidies for domestic services. It aimed to increase the employment of low-qualified labour, and at moving certain activities out of the black economy into the legal circuit. The system works by offering individuals a chance to buy vouchers which can be used to pay those who deliver domestic services such as cleaning, ironing and occasional child-care. From the supplier side, local work agencies coordinate those who deliver the service. A coupon can be used to pay a work hour at a reduced rate and offers an additional fiscal reduction.

While “service coupons” were never meant to be used for the provision of care, the reality is different: the system is especially popular in the provision of home care. The number of vouchers used (counted per hour) per person for this purpose seems to level at around 110 per person per year, or 220 per family per year. The impact of budget

measures rendering the system less attractive is thought to be limited.

As a result of the sixth round of state reform, the system of service coupons have become the responsibility of the regions. As of this writing, the usability of the system for the purchase of non-medical care has been largely unchanged.

Eligibility criteria and user choices: dependency, care needs, income

Since nursing care is covered by the compulsory health insurance system, every elderly person with functional impairments is eligible to receive care. The level of care is determined by the severity of disability, determined by an assessment tool based on the Katz scale. This principle holds both in home and in residential care.

Eligibility criteria for personal care and family care differ slightly between regions. In principal, everyone in need of care is eligible to receive it. The type and amount of care as well as the co-payment to be paid depend on the severity of the problem and the social situation of the applicant (family composition, income, type of residence etc.).

Co-payments, out of the pocket expenses and private insurance

The costs for medical care are reimbursed to the individual by the health insurance organisation, out-of-pocket payments are never higher than what is allowed subject to the system of the “maximum billing system” (described above, chapter 2.3). Moreover, co-payments for some home nursing services were reduced from 15% to 10% as of February 2010.

Expenses related to non-medical long-term care are borne by the individual but are at least partially offset by several cash benefits. On the federal level, a monthly allowance for disabled older persons (*Tegemoetkoming voor hulp aan bejaarden; Allocation pour l'aide aux personnes âgées*) is granted to persons aged 65 and older for whom a severe need for care is ascertained.

This allowance is means-tested. Several other topical allowances exist, aimed at specific costs

(e.g. incontinence material) or circumstances (e.g. for palliative care at home).

Flanders has introduced an additional “Flemish Care Insurance” (*Zorgverzekering*) in 1999, covering some of the costs of non-medical help and services borne by people with reduced self-sufficiency.

The system is organised as a residence-based compulsory insurance-type scheme: every person residing in Flanders is obligatorily covered; persons residing in Brussels are allowed, but not obliged, to join. Note that the *Zorgverzekering* only provides financial benefits; insurance under the scheme is not a requirement for receiving long-term care services. Patients in residential care who do not have the means to pay for board and lodging may receive help through social assistance services which are provided for by the municipalities. However, spouses, children and grandchildren have a legal maintenance obligation toward the person in residential care and as such they may be requested to bear (part of) the costs.

Prevention and rehabilitation measures

Prevention is a regional responsibility in Belgium. In Flanders, its goals have been defined in a ‘Flemish Policy Plan for the Elderly 2015-2020’. They include initiatives to promote a healthy lifestyle (diet, smoking cessation) and physical activity/sports, fall prevention, increased vaccination (especially influenza), to reduce hospital-borne infectious diseases, to reduce medical overconsumption (especially in nursing homes), to improve early detection of cancer and to improve monitoring of mental well-being. In the French-speaking Community, fall prevention was explicitly stated as a target in the Communal Plan for Health Promotion 2008-2013. Particular attention has also been paid to malnutrition in residential care in the ‘Plan Wallon nutrition Santé et bien-être des aînés’ (‘Walloon Nutrition and Well-Being Plan’) which is part of a wider national nutrition plan launched in 2004. More recently, in 2017, a new plan for prevention and promotion of health has been launched by the Walloon Minister of Health (Plan Prévention et Promotion de la Santé en Wallonie - Horizon 2030), with aims similar to those of the Flemish government, although this plan is not specifically targeted at the elderly population.

Formal/informal caregiving

Belgium’s elderly citizens use both formal and informal care rather frequently compared with most other European countries. Data from the 2004 Survey of Health Ageing and Retirement (SHARE) indicate that the share of users of professional nursing care and professional home care is among the highest in Europe (13.4 and 16.6 percent respectively) (see Geerts, 2009). Despite the high reliance on formal care there is also substantial use of informal care. For example, 45 percent of moderately or severely dependent elderly persons living at home receive informal care from someone outside the household (SHARE 2004 data, see Willemé et al. 2012). The caregivers are predominantly partners and adult children. The frequent combination of formal and informal care is rather exceptional, since in most other countries the two forms of care appear to be substitutes rather than complements.

Recently legislated and/or planned policy reforms

In recent years, the Belgian long-term care system did not undergo major reforms. Some developments in the health care system nevertheless have had an impact on the provision of long-term care.

The co-payments that an individual using care would need to pay, were limited through the so called “Maximum Billing System” (*Maximumfactuur*, introduced in 2001). In addition various allowances help people (in particular with lower incomes) cope with the financial burden of non-medical expenses. Also some yearly allowances were introduced, especially for long-term care patients, for example for the use of incontinence material.

The extension of compulsory coverage for self-employed persons from January 2008, can be recognised as an important development. Before 2008, the compulsory health insurance for self-employed persons consisted only of a minimal basic package, covering only “major risks”. Since 2008, the self-employed have a compulsory health insurance with the same coverage as civil servants or employees, which means for example that former self-employed in need for nursing care in homes for the elderly are now covered for such

services. However, the extension of insurance coverage for the self-employed mainly affects acute health care expenditures.

In order to cope with a future increase in demand for long-term care, which is certain but the exact magnitude of which is difficult to predict, more diverse and integrated long-term care services are being developed in Belgium. More and better cooperation should allow dependent persons to stay at home longer and to only move to residential care when absolutely necessary. Organising the move of patients between care facilities remains a difficult challenge.

The main change in health care policy legislated in the recent years concerns the devolution of responsibilities (and shifts in associated budgets) for a number of health care tasks from the federal to the regional level (Flanders, Wallonia and Brussels) as a consequence of the 6th Reform of the State. The reform was signed into law on January 31 2014 and became effective on July 1 2014. While the transferred responsibilities mainly concern care for the elderly, some may be classified as acute care expenditures (see country fiche on health care). A few notable examples are geriatric hospital services, revalidation, mobility aides, prevention and the maximum billing (MAB) payments. The total budget shift from the federal to the regional level is estimated to be approximately 3.4 billion euros in 2015, almost 88% (3 billion euros) of which will be long-term care expenditures. At the time of writing, there has not been any substantial change in the rules that govern the use of services and the associated expenditures. Consequently, the current Belgian projections at the national level assume that the regionalised health care expenditures will evolve according to the same mechanisms that pertained at the federal level.

Challenges

Belgium has a relatively fragmented system of long-term care. The main challenges towards the goal of a sustainable long-term care system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state and regional

authorities with respect to the provision of long-term care services; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing.

- **Encouraging independent living:** to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care; to increase the retention of successfully recruited LTC workers, by improving the pay and working conditions of the LTC workforce, training opportunities, more responsibilities on-the-job, feedback support and supervision; to seek options to increase the productivity of LTC workers.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to continue to promote coordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care coordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care coordination.
- **To facilitate appropriate utilisation across health and long-term care:** to create better

rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; to steer LTC users towards appropriate settings.

- **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and coordination between health and care services.
- **To further the efforts in the area of prevention** and to improve administrative efficiency.

Table 3.2.1: Statistical Annex – Belgium

GENERAL CONTEXT														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2011	EU 2013	EU 2015
GDP and Population														
GDP, in billion euro, current prices	311	327	345	354	349	365	379	388	392	400	410	13,213	13,559	14,447
GDP per capita, PPS	30.9	31.3	31.8	30.9	29.5	30.6	30.7	30.9	30.6	31.2	32.2	28.1	28.0	29.6
Population, in millions	10.4	10.5	10.6	10.7	10.8	10.8	11.0	11.1	11.1	11.2	11.2	503	505	509
Public expenditure on long-term care (health)														
As % of GDP	1.4	1.7	1.7	1.8	2.0	2.0	2.0	2.1	2.1	2.2	2.3	1.2	1.2	1.2
Per capita PPS	394.4	489.6	511.0	532.6	563.6	596.0	616.9	650.5	672.8	720.1	763.7	283.2	352.1	373.6
As % of total government expenditure	2.7	3.5	3.5	3.6	3.7	3.7	3.7	3.7	3.8	4.0	4.2	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts														
Health status														
Life expectancy at birth for females	81.9	82.3	82.6	82.6	82.8	83.0	83.3	83.1	83.2	83.9	83.4	83.1	83.3	83.3
Life expectancy at birth for males	76.2	76.6	77.1	76.9	77.3	77.5	78.0	77.8	78.1	78.8	78.7	77.3	77.7	77.9
Healthy life years at birth for females	62.3	63.2	63.9	64.1	63.7	62.6	63.6	65.0	63.7	63.7	64.0	62.1	61.5	63.3
Healthy life years at birth for males	62.4	63.0	63.5	63.4	63.9	64.0	63.4	64.2	64.0	64.5	64.4	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	24.7	24.8	24.7	25.1	25.6	26.2	24.7	25.9	25.0	24.6	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	7.8	7.4	6.9	7.6	7.9	8.4	7.6	8.1	9.5	8.6	8.3	8.7	8.1
SYSTEM CHARACTERISTICS														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)														
Number of people receiving care in an institution, in thousands	:	:	118	125	132	139	144	149	143	145	148	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	130	248	365	483	491	500	728	737	745	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	2.3	3.5	4.6	5.7	5.8	5.9	7.8	7.9	7.9	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients														
Providers														
Number of informal carers, in thousands	:	420	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.2.2: Statistical Annex - continued – Belgium

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	11.3	11.6	12.3	12.9	13.3	13.6	13.9	23%	2%
Dependency									
Number of dependents in millions	0.94	0.97	1.06	1.17	1.25	1.28	1.33	42%	25%
Share of dependents, in %	8.3	8.4	8.6	9.1	9.4	9.4	9.6	15%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	2.3	2.4	2.6	3.2	3.6	3.8	4.0	73%	73%
AWG risk scenario	2.3	2.5	2.8	3.6	4.4	5.0	5.8	150%	170%
Coverage									
Number of people receiving care in an institution	143,673	153,410	175,120	224,244	268,384	285,620	306,942	114%	72%
Number of people receiving care at home	560,004	583,338	655,063	741,893	803,977	832,465	871,072	56%	86%
Number of people receiving cash benefits	293,450	308,682	350,573	412,796	465,175	491,501	520,105	77%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	8.8	9.0	9.6	10.7	11.6	11.8	12.2	39%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	99.7	99.7	99.7	99.8	99.8	99.8	99.8	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.3	0.3	0.3	0.2	0.2	0.2	0.2	-13%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	56.3	56.5	56.2	57.7	59.1	59.4	59.7	6%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	43.7	43.5	43.8	42.3	40.9	40.6	40.3	-8%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	102.5	102.4	103.3	104.8	105.5	106.8	107.9	5%	10%
Unit costs of home care per recipient, as % of GDP per capita	20.4	20.7	21.5	23.2	24.4	25.0	25.7	26%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4%	-14%

(1) Cash benefits numbers not available as these benefits are recorded as benefits in-kind in the Belgian SHA.

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.3. BULGARIA

General context: expenditure, fiscal sustainability and demographic trends

GDP per capita in Bulgaria in PPS is at 12,500 and around half of the EU average of 29,600 in 2015. Bulgaria has a population of 7.1 million inhabitants. During the coming decennia the population will steadily decrease, from 7.1 million inhabitants in 2016 to 4.9 million inhabitants in 2070. Thus, in Bulgaria the population is expected to decrease by 32%, while it is expected to increase at the EU level by 2%.

Health status

Life expectancy at birth (78.2 years for women and 71.2 years for men in 2015) are one of the lowest in the EU. In contrast, healthy life years, an indicator with a self-reported component, with 65 years for women and 61.5 years for men in 2015 are above the respective EU averages of 63.3 and 62.6. The percentage of the Bulgarian population having a self-reported long-standing illness or health problem is considerably lower than in the Union (21.6% in Bulgaria versus 34.2% in the EU in 2015). In 2014, the percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 4.6%, which is lower than the EU-average of 8.1%.

Dependency trends

The number of people depending on others to carry out activities of daily living increases over the coming 50 years. From 280 thousand residents living with self-reported strong limitations due to health problems in 2016, a decrease of 3% is envisaged until 2070 to 270 thousand, which is in contrast to the steep increase expected in the EU as a whole (25%). However, due to the population decline, as a share of the population, in the period 2016-2070, the dependents are becoming a bigger group, from 3.9% to 5.6%, an increase of 43%. This is more than the EU average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a

moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.1 pps of GDP in Bulgaria by 2070⁽⁴⁴²⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 1.0 pp of GDP in Bulgaria by 2070. This reflects, that coverage and unit costs of care are comparatively low in Bulgaria, and may experience an upward trend in future, driven by demand side factors.

Bulgaria does not appear to face fiscal sustainability risks in the short run. The medium and long-term risks are low as well⁽⁴⁴³⁾.

System Characteristics

There is no well-defined long-term care (LTC) system in Bulgaria. Instead, LTC health and LTC social services are regulated by different bodies and legislation. Depending on the specific case, LTC is provided by the state, the municipal authorities or private providers or social welfare.

The organisation and the provision of social services, including long-term care services, are regulated by the Law on Social Assistance and the Regulations on its Implementation⁽⁴⁴⁴⁾. Social services in Bulgaria are decentralised and are managed by the mayors of the respective municipalities. The mayors are also responsible for fulfilling the criteria and the standards for provision of social services. Municipalities are authorised to initiate the establishment of new social services in line with the national priorities and to develop these services according to the local community needs.

⁽⁴⁴²⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁴⁴³⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁴⁴⁴⁾ According to the Law, social services are activities assisting persons for social inclusion and independent living, which are based on social work and these services are provided in the community and in specialised institutions.

Social services are provided upon request of the potential beneficiary and after undergoing individual need's assessment and the establishment of an individual plan for support. Social services in specialised institutions are provided only after exhaustion of the opportunities for providing social services in the community.

In 2015, municipalities provided long-term care social services at the amount of BGN 206 million (€105 million), accounting for 67% of overall spending on long-term care social services. The most of the services were targeted to persons with disabilities. They included in-kind benefits for accommodation, rehabilitation, assistance in carrying out daily tasks and home help provided to sick or injured people to assist them with their daily tasks ⁽⁴⁴⁵⁾.

People with disabilities are supported financially under the Law on the Integration of Persons with Disabilities and the Regulations on its implementation, the new Law on Persons with Disabilities in force since January 2019 and under other legislative acts. They receive in-kind rehabilitation services accounting for 0.5% of public expenditure on LTC social services.

In addition, under the Law on Family Allowances all family allowances are provided to children with disabilities regardless of the family income. In 2015, families were paid cash benefits amounting at BGN 9.3 million (€4.7 million).

As of January 2017 a new monthly allowance for raising a child with a permanent disability was introduced with amendments to the Law on Family Allowances, affecting more than 26,000 disabled children. The allowance is differentiated according to the degree of the disability or the degree of the reduced capacity of the child and according to its purpose, ranging from BGN 350 (€78.5) to BGN 930 (€174) ⁽⁴⁴⁶⁾. It is not means-tested and is

available for all children with permanent disabilities to cover for their basic and specific needs due to disability. The aim is to ensure the provision of care and support at home and in family environment.

Furthermore, according to the Law on Family Allowances, if permanent disabilities of 50% or more are established by the time the child reaches the age of 2, the mother shall be paid an additional one-off benefit upon childbirth to an amount fixed annually with the State Budget of the Republic of Bulgaria Act for the respective year, but not smaller than in the previous year. In case the child has permanent disabilities, the monthly allowances for raising a child under one year of age shall be paid until the child reaches the age of 2, regardless of the income of the family.

Cash benefits are provided to pensioners with permanently reduced working capacity and degree of disability exceeding 90%, who constantly need attendance. They can receive a supplement to their pension amounting at 75% of the social old-age pension (BGN 94.19 in July 2018) as regulated by the Social Security Code. They are covered by the pensions fund and the pensions not related to labour activity fund, and in 2015 accounted for 27% of all LTC benefits provided in the country.

The financial resources for LTC services are provided from the state budget, the local budgets, by registered private providers such as non-governmental organisations, as well as under various projects of national and international programmes. In recent years, LTC social services have been considerably expanded as a result of actions aimed at deinstitutionalisation and providing more community-based and family-friendly services. However, there are challenges in this area, and a more extensive network of community services and suppliers across the country is needed to meet the demand for care.

Currently, more than 90% of the long-term care social services are public. Institutional care is almost entirely public, while non-governmental organisations and charities are increasingly involved in day care for the elderly. Home care is

their discretion, to manage these funds and to choose whether to take care personally for their children or to hire an assistant.

⁽⁴⁴⁵⁾Data based on selected expenditure categories of the following ESSPROS functions: Old age, Disability and Sickness, Eurostat, ESSPROS data by scheme <https://ec.europa.eu/eurostat/web/social-protection/data/data-by-scheme>.

⁽⁴⁴⁶⁾The focus in the allowances' differentiation is directed to the higher types and degrees of disability. In order to ensure fairness and guarantees for making a decent and independent choice to use the opportunities provided by the state to support children with permanent disabilities and their families, an opportunity is given to their parents, at

provided by individuals contracted by the state or municipalities, depending on the type of service.

Public spending on LTC⁽⁴⁴⁷⁾ was at the level of 0.4% of GDP in 2016 in Bulgaria, much below EU average of 1.6% of GDP. According to the 2018 Ageing Report, in 2016 73.4% of this expenditure was spent on in-kind benefits (EU: 84.4%), while 26.6% was provided via cash-benefits (EU: 15.6%).

The amount of the fees for formal institutional LTC services can be significant. For example, a person that is enrolled in a public facility for institutionalised elderly care needs to transfer up to 80% of his/her retirement income, but not higher than the actual monthly expenditure for the service provided.

Social services are provided in consideration of fees paid by the beneficiaries or on a negotiated basis. Fees for social services which are financed by the state budget are fixed by a Tariff of Social Services Fees endorsed by the Council of Ministers. According to the Tariff, the amount of the social service fee is determined as a percentage of the person's income, depending on the type of social service. The fees should not exceed the actual monthly income of the recipient of care. People with no incomes or deposits, persons accommodated in shelters and in crisis centers as well as the persons who have transferred real estate property to the state or to a municipality with the purpose of developing social services are exempted from paying fees for social services. Fees for social services financed by municipal budgets are paid under the Local Taxes and Fees Act. The payment for social services provided by private providers is made on a negotiated basis when the social services do not constitute activities delegated by the State.

In Bulgaria, similar to the EU average, 49% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. Overall, in 2015 1.9% of the Bulgarian population received formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate

a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

In 2015, the expenditure for institutional (in-kind) services makes up 33.3% of public in-kind expenditure (EU: 66.3%). Thus, relative to other Member States Bulgaria has a less strong focus on institutional care. Typically, as institutional care is relatively costly, Member States with shares well above the EU levels may benefit from efficiency gains by shifting some coverage (and thus expenditure) from institutional to other types of care.

Regarding financial support for provision of social services, in 2016 the state provided approximately BGN 113.6 million for community-based social services for children and adults, as activities delegated by the state to the municipalities. These are significantly higher than the funds provided for specialised institutions (BGN 86.9 million). In addition, since January 2016 the sustainability of 9 centres for family-type accommodation for children/youth with disabilities with constant medical care has been financially ensured by the state budget.

Types of care

LTC services are provided in specialised institutions, community-based social services of residential type close to family environment, and also as daily and consultative community-based social services, as well as home-based social services. Bulgaria is in the process of deinstitutionalising the LTC system, aiming at a higher provision of home and community care services. The main target groups of LTC are people with impairments (disability) and elderly people (65+).

The number of specialised institutions remains the same, but the trend is showing significant reduction of their capacity. As of December 2017, the number of specialised institutions is 161 with a capacity of 10 881 places.

The transition from traditional institutional care to community and family-based services is mainly realised through an expansion of the range of services (day care centres, social rehabilitation and

⁽⁴⁴⁷⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

integration centres, protected housing, family-type accommodation centres), as well as further development of the model for services provided at home (personal assistants, social assistants, domestic assistants, domestic social patronage, public canteens). By June 2018, the number community-based social services for elderly and people with disabilities was 530 with total capacity of 16,206 places. This is a marked increase since 2012, when 370 community-based social services for elderly and disabled people were available with a total capacity of 9,205 places.

Eligibility criteria and user choices: dependency, care needs, income

According to the latest amendments to the Law on Social Assistance (adopted by the National Assembly in January 2016) eligibility for social services is based on a needs' assessment and an individual support plan developed by a multi-disciplinary team within the respective social service. Assessment of LTC needs is individual and normally based on an application to the respective welfare service. Generally, the minimum eligibility criteria are defined in the legislation. They are nation-wide and binding and may include the applicant's income, property status, family status, potential care providers (friends or relatives), type and severity of disability, etc.

General practitioners acting as family doctors are responsible for the initial examination and monitoring of the health status of the elderly. In case of impaired health and the need for LTC, the elderly patient is referred to the relevant health institutions and medical nursing care is arranged, if needed. The arrangements for any medical services, medical nursing care included, are made by the general practitioner. Where necessary, the doctor alerts the social services. Upon receiving an application from the elderly patient or his/her family physician, friends or relatives, the social assistance directorate makes an initial assessment of the situation and decides on the LTC measures and programme to be applied in each specific case.

Prevention and rehabilitation measures

There are a couple of mechanisms for prevention and rehabilitation to be mentioned. The responsible partners for the prevention of long-

term conditions and diseases are the general practitioners. A significant part of the funds for rehabilitation are provided by the healthcare system. As long as there are medical indications for rehabilitation, it is paid by the National Health Insurance Fund (NHIF). Determining the need for rehabilitation is not only the competence of general practitioners, but also of all other medical specialists in the outpatient and inpatient care. There are departments of physical medicine and rehabilitation in all major hospitals and in over 20 specialised rehabilitation hospitals, funded by the NHIF.

Another source for prevention and rehabilitation is the National Social Security Institute (NSSI). The funds provided are defined in the Law on State Social Security Budget and in 2017 amounted to BGN 20.1 million (€10.3 million). It was envisaged for around 47,500 persons to use grants for prevention and rehabilitation. The rehabilitation programme has a maximum duration of 10 days as NSSI assumes the cost of accommodation and partial support for food expenses up to BGN 7 (€3.58) per day-stay. The NSSI signed contracts with 18 entities for a total of 49 institutions implementing this programme. Entitled to this benefits are the socially insured for sickness, maternity and/or accident and occupational disease persons. They must have paid contributions for a period of six consecutive calendar months preceding the month before the start of rehabilitation. The persons should have a specified diagnosis by a certified physician, indicating the need for rehabilitation. Another eligible group is recipients of personal disability pension. The only condition for them is that their age is below the age of entitlement to old-age pension.

Formal/informal caregiving

Traditionally, long-term care for the elderly is provided as informal care by family members. There is little information about the number of people providing informal care, however, there is little doubt that the overwhelming bulk of long-term care is provided by informal carers in families.

As to formal care, in line with the national legislation, the Social Assistance Agency has established a public register of the private

providers of social services who are entitled to provide services on the territory of the Republic of Bulgaria. The information about all social services financed by the state budget is published on the official web page of the Social Assistance Agency and it is regularly updated.

The provision of LTC is still broadly considered to be a family matter. The cultural tradition in Bulgaria encourages care for elderly people to be provided by family members, who are not trained professionally, but accept that responsibility out of a sense of family duty. However, since 2012 trainings for professionalisation of care have been conducted under various schemes under the Operational Programme “Human Resources Development” (OP HRD), co-financed by EU and state funds.

Though informal care thus is of utmost importance, for a long time it has neither been legally recognised nor financially encouraged. Since 2003, informal carers can be financially supported under the National Programme “Assistants to people with disabilities” which provides home-based care (the service “personal assistant”) to people with disabilities and lonely people with serious diseases. Under this Programme, managed by the Agency for Social Assistance, in 2017 the funding reached BGN 8.9 million and it provided employment for 2,450 previously unemployed persons.

Home-based services are provided also by private providers, as well as under EU co-funded projects of the Operational Programme “Human Resources and Development” (OP HRD). From the start of the OP HRD in 2007 the amount of funding for providing home-based social services exceeds BGN 458 million in total. In this regard, it should be noted that the service “personal assistant” was provided under the “New Opportunities for Care” project under the “New Alternatives” operation. The project was implemented by the Agency for Social Assistance in partnership with 264 municipalities and its implementation ended in February 2016. Project services were provided to: people with disabilities in difficulty or inability to self-service; people over 65 years in difficulty or inability to self-service; families of children with disabilities; lonely seriously ill persons. The project covered more than 15,600 service users

supported by approximately 14,700 personal assistants.

The Operation “Independent living” supplements and upgrades measures financed under OP HRD (2007-2013) and OP HRD (2014-2020), through the implementation of an all-embracing approach at municipal level to provide hourly services to disabled people and the elderly who have difficulties for self-care. The implementation takes place in 260 municipalities and 33 districts (in Sofia Municipality, Varna Municipality and Plovdiv Municipality) for nearly 24,800 disabled persons, including children and persons over 65 who are unable to self-service, from 16,500 appointed personal assistants, social assistants and home helpers by the end of 2016.

Taking into account the real needs and significant contribution of social services to the home environment for the support of disabled and elderly people, the Council of Ministers adopted a Decree № 137 of 05.07.2017 approving changes in the 2017 budget programmes of the Ministry of Labour and Social Policies. The decree envisages additional funds for the provision of the social services “Personal assistant”, “Social Assistant” and “Home Assistant”, for more than 15,000 disabled persons and persons over 65 who are unable to self-care.

Recently legislated and/or planned policy reforms

A comprehensive reform in the area of social services sector is underway as part of the efforts to provide entirely new model of providing accessible, qualitative, effective and integrated social services to meet more adequately the needs of vulnerable persons. In the context of the current reform in March 2019 a Law on Social Services (the Social Services Act) was adopted by the National Assembly. It will partly enter in force in 2020 and fully in 2021. The relevant sub-legislative acts, which are necessary for its implementation will also be prepared. The main objective is to improve the regulatory framework in the field of social services with a view to improve the planning, management, financing, quality, effectiveness and monitoring of the social services.

Beginning of 2014, the Council of Ministers has adopted a National Strategy on long-term care. The current Plan for the Implementation of the National Strategy for Long-term Care refers to the period 2018-2021⁽⁴⁴⁸⁾. The main objective of the Strategy is to create conditions for independent and decent living of elderly and people with disabilities by providing quality, accessible and sustainable long-term care services according to their individual needs and achieving a better balance between the quality of the services and their effective and efficient delivery. A strong emphasis in the Strategy is also placed on the deinstitutionalisation of care for the disabled and the elderly, the development of home-based services and the support of families with increased responsibility for the care of dependent family members. The promotion of interaction between social and health services, including the development of innovative cross-sectoral services, as well as the implementation of an integrated approach are also among the priorities of the Strategy.

The strategy has the following objectives: 1) Developing a network for social services in the communities, tailored to the needs of the elderly and disabled people. Provision of both stationary and non-stationary social services close to and in home environment; 2) Adoption of a regulatory framework for a wide range of social services targeting vulnerable groups; 3) Ensuring sustainable financing of LTC services; 4) Improving coordination between the line institutions for LTC; 5) Phased restructuring of the system for inpatient treatment and active deinstitutionalisation.

In 2010, legislation for organising care in homes for medical and social care has been adopted. The aim was to implement continuous medical monitoring and specific care for individuals with chronic diseases, disabilities and social problems. However, so far there is no budget for financing these homes, such that for now these homes have not yet been established.

⁽⁴⁴⁸⁾ Plan for the Implementation of the National Strategy for Long-term Care (2018-2021), www.mlsp.government.bg/index.php?section=POLICIESI&lang=&I=280.

In order to address the challenge for more integrated health care and social services⁽⁴⁴⁹⁾, in September 2015 the National Assembly adopted amendments to the Health Law to regulate the integrated approach. However, the regulatory framework of these amendments is not yet devised, and therefore their implementation has been considerably delayed. It is envisaged that the types of services, the conditions and the order for their provision, the criteria and the standards for the quality of these services and the procedures for implementation of the control over their compliance shall be regulated by an ordinance adopted by the Council of Ministers upon a proposal of the Minister of Health and the Minister of Labour and Social Policy.

Key measures for the realisation of the objectives of the national long-term care strategy, to be financed by the state and municipal budgets, as well as EU funds from the European Social Fund and European Regional Development Fund, are:

- Expanding access to social services, improvement of their quality and interaction between health, social and educational services.
- Deinstitutionalisation of the elderly and people with disabilities placed in institutions.
- The continued implementation of best practices for long-term care for mentally ill patients after their active psychiatric treatment and provision of adequate living conditions in the community through appropriate services and integrated cross-sectorial reintegration programs; The development and validation of a model for provision of long-term treatment and palliative care; The provision of home care for people with chronic diseases resulting in damage to critical functions (respiratory, neuromuscular, renal failure, etc.).

⁽⁴⁴⁹⁾ Integrated health and social services are activities through which medical and social service specialists provide healthcare and medical supervision and perform social work, including in home environments, to support children, pregnant women, people with disabilities and chronic conditions and aged people who need assistance in the performance of their daily activities. The services may be provided by municipalities, medical treatment facilities and the persons under Article 18(2) of the Law on Social Assistance.

- Provision of adequate training and supervision of personnel providing long term care services, creating a system of independent monitoring; developing social support services for dependent people; increase in the number of professionals providing long-term care for dependent elderly and disabled people at home and in the community.
- Increase in efficiency mechanisms for LTC services.

An Action Plan for the period 2018-2021 for the implementation of the National Long-Term Care Strategy has also been adopted by the Council of Ministers in January 2018. The Plan addresses the deinstitutionalisation of the care for elderly people and people with disabilities. The aim is to improve the conditions for independent and decent life of the elderly people and people with disabilities in the community by extending and improving the social services system, including services for social inclusion.

The main groups of measures in the Action Plan are as follows: providing support in home environment and in the community for people with disabilities and elderly people dependent on care; providing quality community-based social services for persons living in specialised institutions with poor living conditions and quality of care and closing of institutions; enhancing the effectiveness of the long-term care system; building the necessary infrastructure for providing social and integrated health and social services for people with disabilities and elderly people dependent on care.

The financing of the Action Plan will be implemented with funds from the state budget and EU funds from the Operational Programme “Regions in Growth” 2014-2020 and the Operational Programme “Human Resources Development” 2014-2020. The Plan envisages the set up of 100 new community-based social services for 2,140 users. Patronage care for disabled and elderly people dependent on care will be developed. It will provide mobile integrated health and social services on hourly basis. The provision of home-based social services will also continue with funds from the state budget. Over

30,000 people will be supported through patronage care and assistant services.

With regard to the quality of long-term care in January 2016 the National Assembly adopted amendments to the Social Assistance Act in order to guarantee better access to social services, including access to long-term care services; applying an individual approach and comprehensive needs’ assessment; prevent permanent institutionalisation of vulnerable persons; higher efficiency of the social services; introducing judicial control during the process of placement of persons under full guardianship in community-based social services of residential type and in specialised institutions; facilitate the registration and licensing regimes for the providers of social services; and others.

The social services’ reform, including the long-term care, is also supported by the implementation of the project “New Standards for Social Services”. The project aims at improving the accessibility, effectiveness and the quality of social services as well as the deinstitutionalisation of the care for children and adults, including disabled people, by developing up-to-date quality standards and financing in line with the needs of the recipients. Within the project financial models for pricing the provision of social services are being developed, including for the long-term care services, as well as a model for financing the integrated cross-sectoral services. An important activity is the development of quality standards with objective and measurable criteria and indicators and a monitoring and control system of the services. Among the activities of the project is also the development of a model for planning of a minimum package of services at regional and municipal level, objective criteria for developing a needs’ map and a map of services at the national level, as well as the development of the maps themselves. The implementation of the project activities will also assist the overall reform in the social services sector. The project should be completed by the end of 2019.

Challenges

Bulgaria has adopted a strategy for strengthening its long-term care system, and the implementation of the project has to be duly monitored. The main challenges of the system appear to be:

- **Improving the governance framework:** to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; To deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to face the increased LTC costs in the future e.g. to foster pre-funding elements, which implies setting aside some funds to pay for future obligations; to explore the potential of private LTC insurance as a supplementary financing tool.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, and the scope of coverage, that is, setting the types of services included into the coverage. To provide targeted benefits to those with highest LTC needs; to reduce the risk of impoverishment of recipients and informal carers.
- **Encouraging independent living:** to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care; to improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through, respite care, cash benefits paid to the care recipients, while ensuring that women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; to steer LTC users towards appropriate settings.
- **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.3.1: Statistical Annex – Bulgaria

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	24	27	32	37	37	38	41	42	42	43	45	12,451	13,213	13,559	14,447
GDP per capita, PPS	11.6	11.7	11.8	11.7	10.7	11.2	11.2	11.4	11.4	12.0	12.5	26.8	28.1	28.0	29.6
Population, in millions	7.7	7.6	7.6	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.1	0.0	0.0	:	:	:	:	:	0.0	0.0	:	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	0.2	0.2	0.2	264.1	283.2	352.1	373.6
As % of total government expenditure	0.2	0.1	0.1	:	:	:	:	:	0.0	0.0	:	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	76.2	76.3	76.6	77.0	77.4	77.4	77.8	77.9	78.6	78.0	78.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	69.0	69.2	69.5	69.8	70.2	70.3	70.7	70.9	71.3	71.1	71.2	76.6	77.3	77.7	77.9
Healthy life years at birth for females	:	71.9	73.9	65.7	65.9	67.1	65.9	65.7	66.6	66.1	65.0	62.0	62.1	61.5	63.3
Healthy life years at birth for males	:	66.2	67.1	62.1	62.1	63.0	62.1	62.1	62.4	62.0	61.5	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	32.1	29.0	24.4	21.4	19.2	18.2	18.6	19.1	20.5	21.6	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	2.5	2.5	4.7	4.5	3.8	4.1	3.9	3.8	4.0	4.6	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	15	24	33	42	43	43	15	15	15	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	33	22	11	:	:	:	106	106	106	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.6	0.6	0.6	0.6	0.6	0.6	1.7	1.7	1.7	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.3.2: Statistical Annex - continued – Bulgaria

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	7.1	6.9	6.4	5.9	5.5	5.2	4.9	-32%	2%
Dependency									
Number of dependents in millions	0.28	0.28	0.29	0.29	0.29	0.29	0.27	-3%	25%
Share of dependents, in %	3.9	4.1	4.5	4.9	5.2	5.5	5.6	43%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.4	0.4	0.5	0.5	0.5	0.6	0.5	37%	73%
AWG risk scenario	0.4	0.4	0.5	0.7	0.8	1.1	1.4	244%	170%
Coverage									
Number of people receiving care in an institution	12,530	12,575	12,859	12,836	12,791	12,787	12,072	-4%	72%
Number of people receiving care at home	21,689	21,733	20,737	19,326	18,879	18,436	17,340	-20%	86%
Number of people receiving cash benefits	101,818	102,983	108,431	109,433	110,159	111,930	107,777	6%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	1.9	2.0	2.2	2.4	2.6	2.7	2.8	48%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	48.6	48.9	49.2	49.0	49.2	49.7	50.4	4%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	75.0	74.3	73.6	73.8	74.6	74.3	73.4	-2%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	25.0	25.7	26.4	26.2	25.4	25.7	26.6	6%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	33.3	33.7	35.4	36.6	37.2	37.5	36.4	9%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	66.7	66.3	64.6	63.4	62.8	62.5	63.6	-5%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	56.9	56.1	59.6	61.8	65.6	64.6	59.0	4%	10%
Unit costs of home care per recipient, as % of GDP per capita	65.8	63.9	67.4	70.9	74.9	74.7	72.0	9%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	7.0	7.0	7.2	7.0	7.0	6.8	6.6	-6%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.4. CROATIA

General context: expenditure, fiscal sustainability and demographic trends

In 2015, GDP per capita was with 16,500 PPS well below the EU average of 29,600 PPS. Croatia has a population of almost 4.2 million inhabitants, which is roughly 0.8% of the EU population. In the absence of any sizeable immigration and a decline in fertility, the population of Croatia is steadily decreasing. In the period from 2016 to 2070 a decrease of 19% can be expected, based on the population forecast of Eurostat, leading to a population of 3.4 million in 2070.

Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part) ⁽⁴⁵⁰⁾ is with 0.9% of GDP in 2015 under the EU average in the same year (1.2%).

Health status

Life expectancy at birth was, in 2015, 80.5 years for women and 74.4 years for men and is, although having increased during the past decade, below the EU average (83.3 and 77.9 years for women and men respectively in 2015). Similarly, the healthy life years at birth for both sexes are with 56.8 years (women) and 55.3 years (men) lower than the EU-average (63.3 and 62.6 respectively). On the other hand, the percentage of the Croatian population having a long-standing illness or health problem is at the same level as in the Union as a whole (34.2%). The percentage of the population indicating a self-perceived severe limitation in its daily activities is at 11.0% compared to the EU-average of (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase over the coming 50 years. From 310 thousand residents living with strong limitations due to health problems in 2016, an increase of 10% is envisaged until 2070 to around 340 thousand. That is less steep an increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from

⁽⁴⁵⁰⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

7.4% to 10.1%. This is above the EU average increase at a projected 35% (EU: 21%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is likely increasing. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a small projected increase in spending of about 0.3 pps of GDP (38%) by 2070, well below the EU average of 73% ⁽⁴⁵¹⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 1.1 pps (127%) of GDP by 2070, markedly lower than the EU average of 170%. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure. Medium fiscal sustainability risks appear over the long run, mitigated by the projected decrease in age-related spending driven by pensions ⁽⁴⁵²⁾.

System Characteristics

Long-term care is organised on the principle of social assistance and financed mainly from the state budget (96%), while the remainder comes from beneficiaries' participation in payment of costs of care outside one's own family. Local and regional self-governing units participate in the financing of the system and organisation of social welfare services within the scope of their competences.

The acting Social Welfare Act (Official Gazette of the Republic of Croatia, 157/13, 152/14, 99/15, 52/16, 16/17, 130/17) is the result of a comprehensive social welfare reform, which includes the reform of cash benefits, the system of social services, the mode of their financing and the

⁽⁴⁵¹⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁴⁵²⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

system of public social welfare centres. The primary objective was to simplify the system and provide better and more efficient access to services and benefits, establish clearer division between cash benefits and social services and rationalise the network of social services centres. Previous 15 cash benefits with different criteria and conditions for obtaining were reduced to 10 better targeted and defined ones ⁽⁴⁵³⁾.

There is no specific national-level data available on long-term care expenses in Croatia. In 2009 expenses for financing of the social welfare system amounted to 0.89% of GDP (Bodiroga-Vukobrat, 2012). The share of beneficiaries of permanent social assistance in total population in 2010 stood at 2.3%, which is an increase of 0.2% as opposed to 2009 (2.1%).

The Ministry of Demographics, Family, Youth and Social Policy is in the lead as far as social welfare (including long-term care) is concerned. Social services are carried out by public institutions: Social Welfare Centres established by the State, institutions for elderly and disabled and people who suffer from severe illnesses, institutions for those with a physical, mental or sensory impairment, care homes for people suffer from mental illness and homes for children and youth with disabilities and behavioural disorders. Social Welfare Centres also decide upon monetary social assistance (European Commission 2013).

Types of care

Social welfare beneficiaries are entitled to (choose freely between) cash benefits, benefits in-kind and social services, as established by law.

There are currently eleven types of cash benefits according to the Social Welfare Act (Article 25), some of which are related to LTC: the guaranteed minimum benefit, the compensation for the cost of housing, the right on firewood costs, the allowance

⁽⁴⁵³⁾ Among ten cash benefits with different criteria and conditions for obtaining, which are better targeted and defined than previous ones, the most innovative is the guaranteed minimum benefit (GMB). GMB consolidates 4 previous supplementary cash benefits, ensuring that persons have enough funds to satisfy their basic monthly personal needs, while also stimulates the activation of those capable of working. Deinstitutionalisation and the role of private providers of social services are emphasised.

for the personal needs of users of accommodation, the one-off cash allowances, the fees related to education, the personal disability allowance, the allowance for assistance and care, the parent caregiver or caregiver allowance, the unemployment allowance and the benefit for endangered buyer of energy sources. The personal disability allowance is granted to persons with grave disability or other severe and permanent changes in health status, for the purpose of satisfying necessities of life for involvement in the daily life of the community.

Large cities and cities which are the seats of counties are obliged to provide other types of material support and assistance, including the stimulation of volunteering and work of civil society organisation. Elderly people mostly rely on the guaranteed minimum benefit, the compensation for the cost of housing, the right on firewood costs, the allowance for the personal needs of users of accommodation, the one-off cash allowances, the personal disability allowance, the allowance for assistance and care and the in-home assistance. The in-home assistance is awarded to persons with secured housing and other living conditions, but who are, due to old age, disability or other grave health conditions unable to take care of their personal needs alone or with help from their families. The condition for receiving this means-tested social service is that the assistance cannot be obtained from parents, spouse or children, nor based on life maintenance and support agreements or other regulations.

There are nine categories of social services, which are basically social benefits in-kind. In-home assistance is an example of a social service. It implies the provision of different practical forms of help, prescribed in bylaws (typically includes delivery of meals, housework, assistance with personal hygiene and satisfying other everyday needs).

The LTC users are most often elderly and people with disabilities. Long-term care is carried out both through institutional and non-institutional forms of care. Long-term accommodation is granted to users who need over a long period of time intensive care and other life needs. There also exists a range of institutionalised forms of care, e.g. permanent or temporary accommodation or even daily or shorter stays in care centres.

In 2016, there were 294 institutional LTC providers, governmental and non-governmental LTC homes and other legal providers (legal persons) for stay in and accommodation of adults and the elderly (196 for the elderly and infirm/seriously sick people, 67 for disabled children and adults with physical, intellectual or sensory impairments and 31 for mentally ill adults) ⁽⁴⁵⁴⁾.

Eligibility criteria and user choices: dependency, care needs, income

Reliance on long-term care is certified by the social welfare centres, established through special regulations. Degree of physical and mental impairment, duration of reliance on care, degree of (full or partial) incapacity for independent living, urgency and scope of assistance and care, screening of income and assets are among the indicators being assessed.

As a rule, the Social Welfare Centre has to verify occasionally or at least once a year, if the conditions for social assistance are still met. It is also a duty of the recipient to report all relevant changes within eight days ⁽⁴⁵⁵⁾.

There are exceptions when means test does not apply, such as serious mental or physical impairment, blindness and/or deafness (if blind/deaf persons have trained to care for themselves, when determining if persons have the right to receive the allowance for assistance and care in full amount, as well as blindness and/or deafness (if blind/deaf persons have trained to care for themselves), or the fact that a person is totally deprived of legal capacity, when determining if persons have the right to receive the allowance for assistance and care in reduced amount.

Means-testing is applied, meaning that a person is only eligible for this kind of assistance if his/her

⁽⁴⁵⁴⁾ Governmental and non-governmental LTC homes, county LTC homes and other legal providers (legal persons) of LTC - total (1.+ 2.+ 3.) includes 294 providers and serves 30.339 users, of which 22.695 are LTC users (i.e. long-term accommodation or organised housing users).. Source: Ministry of Demographics, Family, Youth and Social Policy, Report for 2016.

⁽⁴⁵⁵⁾ Previous supplementary cash benefits, ensuring that persons have enough funds to satisfy their basic monthly personal needs, while also stimulates the activation of those capable of working. Deinstitutionalisation and the role of private providers of social services are emphasised.

average income in the three months preceding the application does not exceed 200% of the base amount (per family member) or 250% of the base amount (single persons) (Article 57 (2) Social Welfare Act). The base amount is defined by Social Welfare Act, Article 27, paragraph 2, and in 2015 it was 500 HRK (about €66).

In 2010, the total of HRK 58.1 million (about €7.5 million) was utilised for the implementation of social services of generational solidarity (day care services and in-home assistance), as well as the improvement of work quality. 75% was financed from the State budget of the Republic of Croatia, while the rest of the financing (25%) was born by the local and regional self-government units.

Role of private sector, private insurance and out of pocket co-payments

In Croatia, more than two thirds of institutional homes for the elderly are privately owned (see footnote 7).

Long-term care is financed from the state budget and partly from the budgets of regional communities (also the city of Zagreb) and local communities. Social services might be co-financed by the beneficiaries and their family members (European Commission, 2013).

Prevention and rehabilitation measures

National and county Centres for gerontology operate at the county institutes of public health. Apart from Centres of Gerontology, there are Gerontology Centres as multifunctional centres of immediate and integral multidisciplinary care for elderly people in the local community. A total of 79 Gerontology Centres for community care of elderly people operate in Croatia, 12 thereof in Zagreb, where most elderly people live (Ministry of Health).

Formal/informal caregiving

The aim of the Foster Families Act (Official Gazette, 90/11, 78/12) is deinstitutionalisation and increase of the number of foster families, their professionalisation and specialisation for taking care of certain categories of beneficiaries. Foster care is defined as a non-institutional type of care for children and adults out of their families. Types

of foster care are defined according to beneficiaries (traditional, specialised, urgent and temporary) as well as the status of foster care (kinship, professional). Foster families for adults, are taking care mainly for elderly and frail persons, persons with disability and mentally ill adults. Foster care is provided only upon referral from the competent Social Welfare Centre.

The scale of family care in Croatia is above the EU27 average. Around 17% of the respondents aged 35-49 report having to care for elderly relatives at least several times a week. The age cohort 50-64 apparently bears the greatest load when it comes to taking care of elderly: 24% female respondents and 13% male respondents of that age group are involved in those activities, which places Croatia among the top three countries in Europe (after Italy and Estonia) (Bodiroga-Vukobrat, 2012).

In addition to religious communities and non-governmental organisations, the role of the civil sector's associations in the long-term care arrangements is important in Croatia. There are various pensioners' associations organised at national, regional and local levels. For example, one of the oldest civil society organisations in Croatia is the National Pensioners' Convention of Croatia (*Cro. Matica umirovljenika Hrvatske*) with around 270,000 members, 300 associations and 800 branches and clubs at the local level. The association and its members, organise the purchase of winter foodstuffs, meat, fruits and vegetables, as well as heating fuel at preferential prices with payment by instalments, while its volunteers visit the sick and infirm, and socialise in clubs, branches and associations.

Recently legislated and/or planned policy reforms

During 2013 a new Act on Social Welfare was created and it was put into force on January 1 2014. This Act established prerequisites for enhancing efficiency, transparency, IT and expertise base in the system of social welfare and as well raises the community awareness of social rights. It contains new criteria for social benefits and services in order to promote the integration of those who suffer social exclusion. Setting standards for quality in social services lays foundations for deinstitutionalisation and

developing new extra-institutional services, it offers wider choice and services improvement within the process of social integration; it enables creation of comprehensive social beneficiaries base. As for the cash benefits, they are better defined in the context of persons at great risk of poverty and social exclusion. The new Act introduced guaranteed minimum benefit, which is a new type of cash benefit merged from four previous social cash benefits which were under jurisdiction of three different Ministries. The state decides on the height of this allowance on an annual basis.

The new Act on Social Welfare enabled transparent and fair system of "social services contracting" which means that all service providers within the network will form the service price on basis of a single calculation methodology and this procedure will be prescribed in a separate bylaw. Final service price will also depend on the service provider's harmonisation with directives for service providing within the network, taking into account his/her professional resources, location and harmonisation with minimum quality standards.

Introducing guaranteed minimum benefit into social welfare system represents the beginning of merging various benefits and services and is a step forward to establishing a centre in charge of all cash benefits, a kind of „one stop shop“. This centre would consequently take charge of all existing cash benefits, which are currently under jurisdiction of various state institutes and offices. Further informatisation of the social welfare system and establishing network with other systems with the scope of data exchange will result with lowering administration costs as well as simplifying the whole process.

Law on Unique Expertise Body (Official Gazette, 85/14, 95/15) presumes founding of the single expertise body meaning that expertise would be done in one place, which would shorten the existing administrative procedures. According to the past regulations every service claimer has to be examined every single time when he/she is claiming for benefits in various systems. Besides generating unnecessary expenses this procedure is quite tiring for the benefit claimer.

According to the new Law on Unique Expertise Body, an individual benefit claimer can obtain his/her rights in various systems based on one document and the expertise given from the single expertise body (pension insurance, professional rehabilitation and employment of persons with disability, various types of maternity and parental allowances, allowances for civil and military war victims). This body should function as an independent working unit within the Institute for expertise, professional rehabilitation and employment of persons with disability, with branch offices all around the country (local and regional). The expertise procedure would be based on a single methodology for determining the disability level/residual functional and working capacity. Since January 1, 2015 responsible for this is the Institute for expert evaluation, professional rehabilitation and employment of disabled people.

Besides the above mentioned laws, this is partly regulated by the Family Law (Official Gazette,103/15) according to which parents have obligation to maintain an adult child who has severe and permanent illness and disability and is not able to live/work independently, children have obligation to maintain their disabled and without living resources parents, and grandchildren have obligation to maintain their disabled and without living resources grandparents (if grandparents maintained grandchildren).

The social welfare system provides assistance to individuals at risk of poverty or social exclusion as well as those living in non-adequate personal or family environment. It includes prevention, promoting changes, assisting individuals, families or groups in their everyday needs as well as enhancing their social inclusion. The concept for fulfilling these conditions is defined by the Ministry of Social Policy and Youth Strategic plan 2015-2017, which sets three goals to be achieved in the upcoming period:

Goal 1. Develop comprehensive approach to various user groups by improving the legislative frame and upgrading service providers efficiency:

- provide equal access to the social services network for all users and providers alike, and effective access to cash benefits for disabled people;

- improve and develop a strategic and legislative framework focussed on elderly, people with addiction problems, asylum seekers, victims of trafficking and homeless;
- increase the efficiency of the social welfare centres;
- improve legal regulations and implement regulations to ensure more effective protection of the individual rights of citizens;
- implement and monitor the process of transformation and de-institutionalisation of social welfare homes founded by the Republic of Croatia;
- increase service quality by improving the infrastructure of homes founded by the Republic of Croatia;
- as stated above, the goal is to improve the system through more efficient legislative frame and developing various social programmes which will, consequently, guarantee system improvements especially in the context of groups at social risk.

Goal 2. Enhance the process of social inclusion for various user groups:

- develop volunteerism and systems of measurement and evaluate volunteer contributions;
- increase availability and quality of social services with the regional uniformity;
- improve quality of professional work providers;
- increase level of social inclusion of people with disabilities;
- develop services that contribute to the inclusion of the elderly, people with addiction problems, asylum seekers, victims of trafficking and the homeless in the community life.

The idea of volunteering development is present in several national documents such as: Croatian Government programme for the period 2011-2015,

Law on Youth, Law on Youth Advisory Boards, Law on Agency for Mobility and EU Programmes, National Youth Programme 2014-2017 and Strategy of Social Care for Older People 2014-2016. Volunteering is presented as an activity to be enhanced and promoted with the goal of improving life quality both for service users and volunteers and enhancing social inclusion of marginalised social groups. Promoting more active engagement of local and regional self-government in social care system by enhancing the work of NGO's and humanitarian aid organisations and assuring them financial assistance contributes to extra institutional service development. This type of service development is planned as well in the Transformation and deinstitutionalisation plan of social care homes and other legal entities who practice social welfare activities in Republic of Croatia 2011-2016 (2018).

Goal 3. Improve care for vulnerable groups by setting more efficient coordination in enforcement of national and international strategic documents:

- ensure conditions for the implementation of EU policies, VE and other international initiatives in accordance with the competence;
- ensure conditions for use of EU funds;
- strengthen workforce and capacity of the respective Croatian social welfare authorities;
- improve care of disabled people by establishing more effective coordination, monitoring and evaluation of the implementation of the National Strategy for Equalisation of Opportunities for Disabled People 2007 to 2015 and the Convention on the Rights of Disabled People.

The Ministry of Social Policy and Youth conducts expert activities related to EU, Council of Europe and UN membership obligations as well as other international and regional initiatives in the field of social policy and social inclusion and it is obliged to submit reports to these organisations. The Ministry also informs various user groups on the possibilities offered in EU funds. Furthermore, it develops bilateral and multilateral cooperation with organisations/institutions acting in the field of

social welfare by organising and participating in international and regional events.

Challenges

Croatia has a relatively fragmented system of LTC, a feature that often leads to inefficiencies. At present, Croatia has not developed a comprehensive strategy and long-term care is spread across health and social-welfare systems.

The main challenges of the system appear to be:

- **Improving the governance framework and administrative efficiency:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities concerning the provision of long-term care services; to strategically integrate medical and social services via such a legal framework; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation.
- **Improving financing arrangements:** to determine the extent of user cost-sharing on LTC benefits; to include assets in the means-test used to determine individual cost-sharing (or entitlement to public support) for B&L costs better reflects the distribution of economic welfare among individuals.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits.
- **Encouraging home care:** to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; to monitor and evaluate alternative services, including incentives for use of alternative settings.

- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; to steer LTC users towards appropriate settings.
- **Improving value for money:** to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.4.1: Statistical Annex – Croatia

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	37	40	44	48	45	45	45	44	43	43	44	12,451	13,213	13,559	14,447
GDP per capita, PPS	15.4	16.4	17.4	17.0	15.3	15.1	15.4	15.5	15.4	15.6	16.5	26.8	28.1	28.0	29.6
Population, in millions	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	:	:	0.0	0.1	0.2	0.2	0.2	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	24.0	27.8	31.7	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	:	:	0.1	0.1	0.3	0.4	0.4	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	78.8	79.3	79.2	79.7	79.7	79.9	80.4	80.6	81.0	81.0	80.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	71.7	72.4	72.2	72.3	72.8	73.4	73.8	73.9	74.5	74.7	74.4	76.6	77.3	77.7	77.9
Healthy life years at birth for females	:	:	:	:	:	60.4	61.7	64.2	60.4	60.0	56.8	62.0	62.1	61.5	63.3
Healthy life years at birth for males	:	:	:	:	:	57.4	59.8	61.9	57.6	58.6	55.3	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	:	:	:	:	36.5	36.8	29.2	31.0	30.9	34.2	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	:	:	:	:	11.4	7.7	5.3	8.0	7.6	11.0	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	:	:	:	:	:	:	16	16	16	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	:	:	:	:	:	:	17	17	17	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	:	:	:	:	:	:	0.8	0.8	0.8	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	4.3	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.4.2: Statistical Annex - continued – Croatia

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	4.2	4.1	3.9	3.8	3.7	3.5	3.4	-19%	2%
Dependency									
Number of dependents in millions	0.31	0.31	0.33	0.35	0.35	0.35	0.34	10%	25%
Share of dependents, in %	7.4	7.7	8.4	9.2	9.5	9.8	10.1	35%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	0.9	1.0	1.1	1.1	1.2	1.2	38%	73%
AWG risk scenario	0.9	0.9	1.0	1.2	1.4	1.6	2.0	127%	170%
Coverage									
Number of people receiving care in an institution	21,020	22,079	22,719	26,283	26,776	26,317	27,298	30%	72%
Number of people receiving care at home	22,322	23,367	24,056	27,562	27,987	27,471	28,360	27%	86%
Number of people receiving cash benefits	112,385	113,972	118,127	123,342	120,980	117,447	115,265	3%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.7	3.9	4.2	4.6	4.8	4.9	5.0	35%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	50.2	50.7	49.5	50.8	50.4	49.6	50.0	0%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	50.0	50.8	51.0	52.8	53.9	54.8	56.9	14%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	50.0	49.2	49.0	47.2	46.1	45.2	43.1	-14%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	94.7	94.8	94.8	94.9	95.0	95.0	95.0	0%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	5.3	5.2	5.2	5.1	5.0	5.0	5.0	-5%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	83.1	82.7	84.4	80.3	79.9	81.5	81.9	-1%	10%
Unit costs of home care per recipient, as % of GDP per capita	4.3	4.3	4.4	4.1	4.1	4.1	4.1	-5%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	16.4	16.4	16.4	16.1	15.9	15.9	15.5	-6%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.5. CYPRUS

General context: expenditure, fiscal sustainability and demographic trends

GDP per capita is below EU average based on the most recent figures, with 23,820 PPS in 2015 (EU: 29,610). Population was estimated at 0.9 million in 2016⁽⁴⁵⁶⁾. According to Eurostat projections, the total population is projected to increase from that level to 1.0 million in 2070, a 20% increase which is well above the average EU value of 2%. Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part)⁽⁴⁵⁷⁾ is, with 0.3 % of GDP in 2015, below above the EU average in the same year (1.6%). The health component however, with 0.2% in 2015 is lower than the EU average of 1.2% in the same year.

Health status

Life expectancy at birth, 83.7 years for women and 79.9 years for men, was above EU average levels of 83.3 and 77.9 years in 2015. However, in terms of healthy life years, Cyprus is broadly in line with the average with 63.4 years for women and 63.1 years for men (vs. 63.3 and 62.6 in 2015 in the EU). The percentage of the population having a long-standing illness or health problem is below the value for the Union as a whole (32.7% in Cyprus versus 34.2% in the EU in 2015). The percentage of the population indicating a self-perceived severe limitation in daily activities for the same year stands at 7.9%, which is only slightly lower than the EU-average of 8.1%.

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase significantly over the coming 50 years. From 70 thousand residents living with strong limitations due to health problems in 2016, an increase of 107% is envisaged up to 2070, to slightly less than 140 thousand. That is a steeper increase than in the EU as a whole (25% in the EU). Also as a share of the population the dependents are projected to become a bigger group, from 7.8% to 13.4%, an

increase of 73%, well above the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is projected to steadily increase. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and by a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.3 pps of GDP by 2070⁽⁴⁵⁸⁾, an increase of 84% which stands above the average EU value of 73%. The "AWG risk scenario", which also captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.9 pps of GDP by 2070. This reflects the fact that coverage and unit costs of care are relatively low in Cyprus, and may experience an upward trend in future, driven by demand side factors. Overall, the projected long-term care expenditure increase is expected to add to budgetary pressure, contributing to the risk for long-term sustainability of public finances⁽⁴⁵⁹⁾.

System Characteristics

Policies and measures that fall within the spectrum of long-term care are administered by the Ministry of Health (long-term health care) and the Ministry of Labour, Welfare and Social Insurance (MLWSI) (long-term social care, sensory, cognitive) through the Welfare Benefits Administration Service, the, Social Welfare Services (SWS) and the Department for Social Inclusion of Persons with Disabilities (DSID).

In July 2014, the Guaranteed Minimum Income (GMI) and Social Benefits legislation was adopted and the competent Ministry is MLWSI.

⁽⁴⁵⁶⁾ Based on Eurostat projections.

⁽⁴⁵⁷⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

⁽⁴⁵⁸⁾ The 2018 Ageing Report:

https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁴⁵⁹⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

The Guaranteed Minimum Income and in general the Social Benefits (Emergency Needs and Care Needs) Decree of 2015 N.353/2015, which was revised in 2016 (N. 162/2016), incorporates the “*Scheme for the Subsidisation of Care Services*” which covers social care needs of recipients of guaranteed minimum income and members of their family unit. The Scheme mainly covers cash benefits and in justified cases it may provide for in-kind services (from state home carers who are employed under a contract with the government to provide their services – *benefits in kind*– to the beneficiaries).

Subsidisation of care services under the Decree, covers home care, day care, respite care and residential care in approved and registered care services (natural and/or legal persons) under the relevant legislative framework of the SWS. Long-term social care services are provided by the government, local authorities, non-governmental organisations (NGOs), and the private sector (private for profit enterprises).

In addition, two new Decrees were adopted in 2017 (365/2017) and 2018 (158/2018), covering in particular the subsidisation of home care services to persons with disabilities and persons aged 80 years old and above, respectively.

Furthermore, the MLWSI subsidise social care programmes at local level run by NGO’s and Local Authorities [State Aid Scheme, under the Regulation 360/2012 for the provision of services of general economic interest (De minimis)]. These programmes (day-care, residential care, home care and child care) cover the social care needs of older people, people with disabilities and children at local level.

The State (SWS) provides full time care in residential homes for older persons and persons with mental and physical disabilities and it operates Houses in the Community for persons with mental and physical multiple disabilities.

Moreover, additional cash benefits are regulated by the DSID for persons with disabilities, irrespective of their income level, targeting to cover the cost of disability. In particular, under two special laws and two schemes, persons with severe motor disability, paraplegia, quadriplegia or blindness are entitled to monthly cash benefits.

These benefits cover the cost for the purchase of care services but also rehabilitation services (physiotherapy, occupational therapy, speech therapy etc). Due to the absence of a National Health System and an integrated rehabilitation policy, persons with disabilities often use DSID cash benefits for purchasing rehabilitation services from the private sector.

Long-term care constitutes a minor share of total government expenditure. In 2015, per capita spending for this item was at the level of 38.5 million PPS (EU: 373.6 PPS). In terms of total government spending, this accounted for only 0.4% (EU: 2.5%).

Public spending on long-term care in Cyprus reached 0.2% of GDP in 2013 and remained stable at that level until 2015, well below EU average of 1.2% of GDP. Only more than half of this spending, (54%) was spent on in-kind benefits, which is a much lower share than for the EU as a whole (EU 2016: 84.4%), while 46%, far above the EU average of 15.6% for 2016, was provided as cash-benefits. Based on available figures, Cyprus appears to have a stronger focus on cash benefits, which is a consequence of the lack of a formal public long-term care scheme. It is not clear which role private co-payments for formal in-kind care play in the financing of long-term care services.

Types of care

The expenditure for institutional (in-kind) services makes up 12.7% of public expenditure on long-term care in-kind (EU: 66.3%), 87.3% are being spent for long-term care services provided at home (EU: 33.7%). However, as discussed above, Cyprus spends most of its long-term care resources via cash benefits, thus with a greater focus on home care.

According to the Decree 162/2016 the following types of care (formal care), are covered:

Home care may include personal and household care. To cover the needs of home care either by an approved natural and/or legal person, or by Domestic Worker the maximum amount granted as a subsidy is €400/month per family unit. For extraordinary and justified cases a larger amount can be covered for instance, when additional care

attendants are required. According to the Decree 158/2018, for persons aged 80 years old and above the amount of subsidisation for home care services is €200 or €400, according to their needs.

Day care: is offered during the day at Day Care Centers for the Elderly and Persons with Disabilities covering personal care services, meals, social and creative activities. The State may pay a cash benefit to recipients of long-term care of up to €137 per month for day care provided by approved physical and/or legal persons. In some cases the transportation/accompanying costs especially for persons with disabilities are also covered.

Residential care: provides for a 24 hour care, where the person requires continuous support and their needs cannot be covered by family members or other supportive services in their environment. Residential care is provided by the public, private or non-governmental. In addition to free residential care in public institutions, the state may pay monthly cash benefit for residential care provided by approved natural and/or legal persons. Cash benefits vary from €625 to €745 per month depending on the care needs of the beneficiary (e.g. bedridden, mobility difficulties or not).

Respite Care: is for short periods of time in order to give short spells of rest to the informal caregiver and can take the form of the above types of care (home, residential or day care). Informal carers are supported in their valuable role and simultaneously the person concerned is supported for staying in their home environment. Respite care is arranged depending on the needs and preferences of the people themselves and of their families as far as possible.

The level of the subsidisation for the above types of care is defined by an automated analysis of the specific assessment tools used by the SWS.

In the case of DSID cash benefits can be used by the beneficiaries at their choice of care services either formal or informal.

In addition, as from November 2017 a new Decree 365/2017 was issued according to which home care for persons with disabilities in the framework of the Guarantee Minimum Income Law has four level subsidy being €100, €200, €300 or €400. The needs for care at home and the level of subsidy are

assessed and certified by the Disability Assessment Center of the Department for Social Inclusion of Persons with Disabilities.

Eligibility criteria and user choices: dependency, care needs, income

GMI recipients may be entitled to subsidisation of their long-term social care needs, except for persons with severe disability (motor/paraplegia/quadriplegia/blindness), who are entitled to this irrespective of their income level. Subsidisation for long-term social care may also be provided to persons that are not eligible for GMI, if their income is not sufficient to cover for their long term social care needs, provided that they meet all the other conditions specified in the GMI legislation.

No qualifying period is defined for long-term social care eligibility. Entitlement to long-term social care is based upon need, i.e. based on the person's ability to carry out his/her daily home and personal care and his/her ability to meet his/her frequent activities outside of his/her home (i.e. shopping, doctor visits, social activities). In addition, the Decree (N.162/2016) does not provide for any element of duration/degree of dependency. Only in the case of home care provided by Domestic Worker, the persons should be deprived of their ability for self-care.

GMI applications are evaluated by the Welfare Benefits Administration Service, which informs the SWS whether the applicant fits in the category of people who can be assessed for the provision of care services based on the legislation and whether the applicant receives care benefit from any other Service. Subsequently, the SWS assess the social care need of applicants and then communicate the results of their assessment to the Welfare Benefits Administration Service for their decision on the application according to the results of the assessment.

The SWS perform *in situ* visits to the accommodation of the applicants/beneficiaries to assess the need for care with the use of specific assessment tools. The SWS may ask for additional certificates/reports from other Services (including medical reports). Subsequently, the information collected is assessed by Specialised Assessment Teams of the SWS. In case of a positive evaluation

of the care needs of the applicant/ beneficiary which corresponds to the approval of care provision, it includes the type, the extent and the duration of the care that will be provided as well as the amount of subsidisation. Between the beneficiary and the approved service provider an Agreement for the Provision of Social Care is signed, which should be notified to the SWS for the correctness of the content and for the future quality checks of the service provision.

In case the beneficiaries prefer a different type of care than the one proposed, then they have the right to make their own arrangements, which will be subsidised up to the approved amount.

In the case of persons with disabilities, in order to become entitled of disability cash benefits by DSID or the GMI-Disability additional benefit they have to follow a disability assessment and certification through the DSID Disability Assessment Centre. The disability assessment methodology is based on the International Classification of Functioning, Disability and Health (ICF) issued by the World Health Organisation (WHO).

According to Decree 365/2017 as from November 2017, the Disability Assessment Centers of the Department for Social Inclusion of Persons with Disabilities also assess and certify, based on the ICF classification, the needs of persons with disabilities for care at home.

Prevention and rehabilitation measures

In Cyprus the health care system for the elderly people is strongly acute-care oriented. Hospital and specialist care is a priority over other models of care. Elderly patients have the opportunity to visit the primary health care services either at the out patients surgeries or at the health care centers all over the districts. The GPs do not function as gatekeepers for medical care, as hospitals and private specialists are directly accessible to patients. Nursing homes as such do not exist, but elderly and very elderly people in need of complex care stay in hospitals or in special care wards in retirement homes. Health care provision is also offered in hospital physiotherapy services, according to their needs.

Long-term care includes health, personal, and support services, aiming at helping people to remain at home and live as independently as possible. Long-term care is mainly provided either in the home of the person receiving services or at a family member's home. In-home services may be short-term -for someone who is recovering from surgery, for example -or long-term, for people who need help continuously.

Long-term care Services are provided mainly to people with a high level of dependency, often elderly people, those with chronic diseases and people with physical, learning and mental disabilities. The Nursing Services of the Ministry of Health facilitate the long-term care provided by a network of Community Nurses (General Nursing Community Nurses and Mental Health Community Nurses) through home visits to mentally ill patients, disabled people, artificially ventilated patients at home and elderly people who live alone and encounter severe health problems.

The long-term care provided by the Mental Health Services, is being ensured by monitoring chronic mental patients in the community (at their homes or at rehabilitation units, such as Day Centers and Occupational Rehabilitation Units). These services are provided by a multi-disciplinary team of mental health professionals – psychiatrists, clinical psychologists, ergo therapists, nursing officers.

Dental Services have a wide network of clinics geographically distributed to provide access in remote areas populated predominantly by elderly people. These clinics in the rural and urban areas offered primary and secondary oral care services. Alongside the four large hospitals operate prosthetic clinics for construction of partial and full dentures. Beneficiaries as third age patients, have to pay a small amount of 100 euro per item (denture).

Formal/informal caregiving

In the case of DSID cash benefits can be used by the beneficiaries at their choice of care services either formal or informal.

Recently legislated and/or planned policy reforms

In July 2014, the Cyprus Government has reformed the welfare system by introducing a Guaranteed Minimum Income (GMI). In the relevant Law (N. 109(I)/2014), article 10 (2) refers to the care needs of the GMI recipients and their family members, where additional assistance can be provided. In this direction, the Minister of Labour, Welfare and Social Insurance, issued in August 2014 a Decree that incorporates the “Scheme for the Subsidisation of Care Services”, which was revised in 2015 (N.353/2015) and in 2016 (162/2016). The new Scheme subsidises the social care needs of GMI recipients, including the members of their family unit, as described in section “LTC System Characteristics”.

In addition, two new Decrees were adopted in 2017 (365/2017) and 2018 (158/2018), covering in particular the subsidisation of home care services to persons with disabilities and persons aged 80 years old and above, respectively.

In addition, the SWS, as the competent authority for the inspection of the minimum quality standards of care structures, have determined in 2016 Terms and Conditions for the Provision of Home Care Services, pending the drafting of a new law which will regulate home care provision.

Challenges

Cyprus has recently reformed and clearly defined eligibility for long-term care benefits, but the financing of the system is relatively fragmented and overall governance seems improvable. The main challenges of the system appear to be:

- **Improving the governance framework:** to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and

providers; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes.

- **Improving financing arrangements:** to face the increased LTC costs in the future e.g. by tax-broadening, which means financing beyond revenues earned by the working-age population; to foster pre-funding elements, which implies setting aside some funds to pay for future obligations; to explore the potential of private LTC insurance as a supplementary financing tool.
- **Providing adequate levels of care to those in need of care:** to reduce the risk of impoverishment of recipients and informal carers.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, , carer’s allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to establish better coordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** to steer LTC users towards appropriate settings.

- **Improving value for money:** to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.5.1: Statistical Annex – Cyprus

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	15	16	18	19	19	19	20	19	18	18	18	12,451	13,213	13,559	14,447
GDP per capita, PPS	27.1	27.6	28.9	28.1	26.3	25.4	24.6	23.2	21.9	22.1	23.8	26.8	28.1	28.0	29.6
Population, in millions	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	33.0	34.6	33.5	33.9	35.2	38.5	264.1	283.2	352.1	373.6
As % of total government expenditure	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.4	0.3	0.4	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	80.8	82.0	82.1	82.9	83.5	83.9	83.1	83.4	85.0	84.7	83.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.5	78.1	77.6	78.2	78.5	79.2	79.3	78.9	80.1	80.9	79.9	76.6	77.3	77.7	77.9
Healthy life years at birth for females	58.2	63.4	62.8	64.5	65.3	64.2	61.0	64.0	65.0	66.3	63.4	62.0	62.1	61.5	63.3
Healthy life years at birth for males	59.8	64.2	63.1	63.9	64.8	65.1	61.6	63.4	64.3	66.1	63.1	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	29.1	28.7	25.9	28.4	34.0	32.7	32.6	33.2	32.2	32.7	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	8.5	8.2	6.9	6.7	7.6	10.3	7.9	8.0	7.3	7.9	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
Coverage (Based on data from Ageing Reports)															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Number of people receiving care in an institution, in thousands	:	:	3	3	4	4	4	5	3	3	3	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	:	:	:	:	:	:	3	3	3	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.4	0.4	0.5	0.5	0.5	0.5	0.7	0.8	0.8	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.5.2: Statistical Annex - continued – Cyprus

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	0.9	0.9	0.9	1.0	1.0	1.0	1.0	20%	2%
Dependency									
Number of dependents in millions	0.07	0.07	0.09	0.10	0.11	0.12	0.14	107%	25%
Share of dependents, in %	7.8	8.2	9.3	10.4	11.4	12.3	13.4	73%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.3	0.3	0.4	0.4	0.4	0.5	0.6	84%	73%
AWG risk scenario	0.3	0.3	0.5	0.7	1.1	1.8	3.2	947%	170%
Coverage									
Number of people receiving care in an institution	8,390	9,186	11,530	13,967	16,224	18,538	21,528	157%	72%
Number of people receiving care at home	7,798	8,530	10,753	13,066	15,187	17,497	20,603	164%	86%
Number of people receiving cash benefits	23,009	24,654	29,588	34,564	39,108	44,046	49,959	117%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	4.6	4.9	5.6	6.4	7.2	7.9	9.0	96%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	59.3	59.4	60.5	61.9	62.9	64.3	67.2	13%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	54.0	54.2	53.7	54.6	55.6	57.2	58.9	9%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	46.0	45.8	46.3	45.4	44.4	42.8	41.1	-11%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	12.7	12.7	12.7	12.7	12.8	12.9	12.9	1%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	87.3	87.3	87.3	87.3	87.2	87.1	87.1	0%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	2.1	2.1	1.9	1.9	1.9	2.0	2.0	-5%	10%
Unit costs of home care per recipient, as % of GDP per capita	15.5	15.3	14.1	13.7	13.7	14.2	14.1	-9%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	5.1	5.1	5.1	4.9	4.9	4.8	4.7	-9%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.6. CZECH REPUBLIC

General context: expenditure, fiscal sustainability and demographic trends

GDP per capita in PPS is at 23,700 and below EU average of 29,600 in 2015. The Czech Republic had a population of 10.5 million inhabitants in 2016 and during the coming decennia the population will slightly decrease to 10.0 million by 2070.

Health status

Life expectancy at birth for both women and men is respectively 81.6 years and 75.7 years in 2015 and is below the EU averages (83.3 and 77.9 years, respectively). Healthy life years at birth are with 63.7 years (women) and 62.4 years (men) around the EU-averages (63.3 and 62.6, respectively). The percentage of the Czech population having a long-standing illness or health problem is at EU average (32.5% in the Czech Republic vs. 32.5% in the EU). The percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 6.5% in 2015, which is lower than the EU-average (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 630 thousand residents living with strong limitations due to health problems in 2016, an increase of 37% is envisaged until 2070 to 870 thousand. That is a steeper increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 6% to 8.7%, an increase of 45%. This is more than the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.6 pps

of GDP by 2070 ⁽⁴⁶⁰⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.4 pps of GDP by 2070. This reflects, that coverage and unit costs of care are comparatively low in the Czech Republic, and may experience an upward trend in future, driven by demand-side factors.

Overall, the projected long-term care expenditure poses a risk to the long-term sustainability of public finances. Over the long run, medium fiscal sustainability risks appear for the Czech Republic. These risks derive primarily from the projected impact of age-related public spending (notably health care, long-term care and pensions) ⁽⁴⁶¹⁾.

System Characteristics

Funding and also provision of long-term care is not completely separated from health and social care. Home care services are provided by special providers contracted by health insurers and reimbursed by public health insurance system only if indicated by a general practitioner. Institutional care is provided in specific facilities or in residential social care establishments, predominantly providing social care and nursing care to a limited extent only. Reimbursement for home and institutional care is based on fee-for-service.

Based on the 2018 Ageing Report, total public spending on LTC (health and social part) ⁽⁴⁶²⁾ reached 1.3% of GDP in 2016 in the Czech Republic, below EU average of 1.6% of GDP. The Czech Republic relies primarily on in-kind benefits. In fact, 87.3% of public LTC spending is done via in-kind benefits, which is slightly above the EU average (EU: 84.4%).

⁽⁴⁶⁰⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁴⁶¹⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁴⁶²⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 90.4% much higher in the Czech Republic. It means that 9 out of 10 individuals aged 15 or more and declaring themselves as severely dependent, would receive some kind of formal care (at home or in institution, in-kind or in cash). Overall, 5.4% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%).

The expenditure for institutional (in-kind) services makes up 77.2% of public in-kind expenditure (EU: 66.3%), 22.8% being spent for LTC services provided at home (EU: 33.7%). Thus, relative to other Member States the Czech Republic has a focus on institutional care, which may not always be cost-efficient. As institutional care is relatively costly, Member States with shares well above the EU levels may benefit from efficiency gains by shifting some coverage (and thus expenditure) from institutional to other types of care. However, in the Czech Republic a significant part of the costs of institutional care is covered by the care recipients themselves. Thus, shifting from institutional long-term care to home care may not heavily decrease public costs, but may improve quality of life of recipients who receive care at home rather than in institutions.

Types of care, eligibility criteria and user choices: dependency, care needs, income

Recipients of care are differentiated on a four level scale according to the recipient's care needs, which is specified in the law. Care allowance is not means-tested except for patients under the age of 18 years. The highest care allowance amounts to roughly half of the average salary.

Social care services are mostly provided by informal carers, but also by professional social services. Formal carers of social services can be registered or unregistered. If registered, they are bound by administrative maximum prices. If a person is unregistered, then free pricing of services applies to be fully covered by private payments. Some services, such as social prevention or rehabilitation are provided without private co-payments. For institutional care, recipient's income (up to 85%) can be used to cover accommodation and food costs for residential care. Reimbursement of other social services is limited by the recipient's

care allowance. Any remaining costs have to be covered privately, either by the recipient or his family. However, in some cases, a top-up from the Ministry of Labour and Social Affairs and the municipalities to cover nursing care can be made available.

Recently legislated and/or planned policy reforms

A new long-term attendance benefit, covered by the sickness insurance, has been effective as of June 2018 for people who take care of their relative or household member after a hospital discharge, when all-day care is needed for at least one month. The benefit amounts to 60% of the reduced daily assessment base for up to 90 calendar days. During this period, employers are obliged to keep the attending person's position.

An interdepartmental working group has been set up several years ago to prepare a structural reform in order to harmonise health and social long-term care systems, which, although interconnected, are run separately by the Ministry of Health and the Ministry of Labour and Social Affairs. The current dual scheme leads to distorted incentives and ineffective usage of health and LTC facilities. However, so far this cooperation did not deliver any concrete results.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities with respect to the provision of long-term care services; to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to share

data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.

- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the breadth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the depth of coverage, that is, setting the types of services included into the coverage.
- **Encouraging home care:** to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; to monitor and evaluate alternative services, including incentives for use of alternative settings.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Facilitating appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; to steer LTC users towards appropriate settings.
- **Improving value for money:** to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.6.1: Statistical Annex – Czech Republic

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	110	124	138	161	149	157	164	161	158	157	168	12,451	13,213	13,559	14,447
GDP per capita, PPS	20.0	21.0	22.2	22.2	20.6	21.1	21.7	21.6	21.8	22.5	23.7	26.8	28.1	28.0	29.6
Population, in millions	10.2	10.2	10.3	10.3	10.4	10.5	10.5	10.5	10.5	10.5	10.5	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.9	0.9	0.9	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	204.3	239.5	254.6	264.1	283.2	352.1	373.6
As % of total government expenditure	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.7	2.0	2.2	2.2	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	79.2	79.9	80.2	80.5	80.5	80.9	81.1	81.2	81.3	82.0	81.6	82.6	83.1	83.3	83.3
Life expectancy at birth for males	72.9	73.5	73.8	74.1	74.3	74.5	74.8	75.1	75.2	75.8	75.7	76.6	77.3	77.7	77.9
Healthy life years at birth for females	60.0	59.9	63.3	63.4	62.7	64.5	63.6	64.1	64.2	65.0	63.7	62.0	62.1	61.5	63.3
Healthy life years at birth for males	58.0	57.9	61.4	61.3	61.1	62.2	62.2	62.3	62.5	63.4	62.4	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	29.8	27.7	27.8	29.7	29.0	30.7	30.0	31.5	31.7	34.2	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.8	5.4	5.6	6.2	6.0	6.1	6.2	6.4	6.2	6.5	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	51	71	91	111	113	115	345	349	353	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	120	112	104	96	99	101	94	96	98	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.7	1.8	1.9	2.0	2.0	2.1	4.2	4.2	4.3	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	257	276	281	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	38	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.6.2: Statistical Annex - continued – Czech Republic

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	10.6	10.7	10.7	10.5	10.5	10.3	10.0	-6%	2%
Dependency									
Number of dependents in millions	0.63	0.66	0.76	0.81	0.83	0.87	0.87	37%	25%
Share of dependents, in %	6.0	6.2	7.1	7.7	7.9	8.5	8.7	45%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.3	1.4	1.8	2.1	2.4	2.8	2.9	116%	73%
AWG risk scenario	1.3	1.4	1.8	2.3	2.7	3.3	3.7	175%	170%
Coverage									
Number of people receiving care in an institution	125,840	134,431	164,088	192,040	202,592	228,340	243,099	93%	72%
Number of people receiving care at home	99,886	109,081	142,529	169,421	183,027	213,525	223,704	124%	86%
Number of people receiving cash benefits	346,008	369,567	455,729	528,793	558,488	637,374	671,357	94%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	5.4	5.8	7.1	8.4	9.0	10.5	11.4	111%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	90.4	92.8	99.9	100.0	100.0	100.0	100.0	11%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	87.3	87.1	87.3	87.4	87.9	87.7	87.1	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	12.7	12.9	12.7	12.6	12.1	12.3	12.9	2%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	77.2	76.7	75.1	74.6	73.9	73.2	73.4	-5%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	22.8	23.3	24.9	25.4	26.1	26.8	26.6	17%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	76.0	74.6	75.6	76.4	80.2	79.7	75.9	0%	10%
Unit costs of home care per recipient, as % of GDP per capita	28.3	28.0	28.8	29.6	31.4	31.2	29.9	6%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	5.2	5.2	5.3	5.4	5.4	5.5	5.6	7%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.7. DENMARK

General context: expenditure, sustainability and demographic trends

GDP per capita in PPS is at 34,800 and far above EU average of 29,600 in 2015. Denmark has a population of 5.7 million inhabitants. During the coming decennia the population will steadily grow, from 5.7 million inhabitants in 2016 to 6.8 million inhabitants in 2070. This 19% increase is much higher than the EU average of 2%.

Health status

Life expectancy at birth for both women and men is respectively 82.7 years and 78.8 years in 2015 and is slightly below the EU average for women and above the EU average for men (83.3 and 77.9 years, respectively). Healthy life years at birth are with 57.6 years (women) and 60.4 years (men) below the EU averages (63.3 and 62.6, respectively). The percentage of the Danish population having a long-standing illness or health problem is lower than in the Union (29.4% in Denmark versus 34.2% in the EU). The percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 6.6%, which is lower than the EU-average (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 390 thousand residents living with strong limitations due to health problems in 2016, an increase of 39% is envisaged until 2070 to 540 thousand. That is a steeper increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 6.8% to 7.9%, an increase of 17%. This is slightly less than the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 2.2 pps

of GDP by 2070 ⁽⁴⁶³⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 4.8 pps of GDP by 2070.

Overall, projected long-term care expenditure increase is expected to add to budgetary pressure. However, currently low fiscal sustainability risks appear for Denmark over the long run. This derives primarily from a favourable initial budgetary position, which fully mitigates the projected ageing costs increase over the long term ⁽⁴⁶⁴⁾.

System Characteristics

Denmark has a universal and very extensive system of LTC. The overall principles of the system are determined by the central government, while local authorities are responsible for the allocation of resources, the delivery of LTC services, and the design and implementation of actual LTC policy. Therefore, 98 municipalities are responsible for a broad range of welfare services which can be provided as institutional care facilities, special housing, or home care.

Along with the Netherlands and other Nordic countries such as Sweden, Denmark has one of the highest expenditure on LTC of all EU-28 countries in 2016. Local authorities are responsible for the allocation of resources. Their LTC costs are financed through governmental grants, local taxes and equalisation amounts (received from other local authorities). The budget for LTC services is set annually and is global. As a general rule, local authorities can't set charges for LTC help, although there are exceptions.

Total public spending on LTC ⁽⁴⁶⁵⁾ reached 2.5% of GDP in 2016 in Denmark, above EU average of

⁽⁴⁶³⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁴⁶⁴⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁴⁶⁵⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

1.6% of GDP. All public expenditure on LTC in 2016 were spent on in-kind benefits. Most in-kind expenditure is covered by the public payer, as 92.4% of total LTC in-kind expenditure was public, and 7.6% private. Thus, private co-payments for formal in-kind LTC have a marginal role in financing.

In Denmark, 41% of dependents are receiving formal in-kind LTC services (EU: 50%). Overall, 2.8% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 34.4% of public in-kind expenditure (EU: 66.3%), 65.6% being spent for LTC services provided at home (EU: 33.7%). Thus, relative to other Member States Denmark has a focus on home care, which may be cost-efficient. As institutional care is relatively costly, Member States with shares well above the EU levels may benefit from efficiency gains by shifting some coverage (and thus expenditure) from institutional to other types of care.

Types of care

One of the main aims of social services for elderly and disabled people is to ensure that they can manage living in their own homes. In cases where elderly or disabled people cannot manage living on their own, they can move to residential care homes and sheltered homes. Eligibility is based on a needs' assessment performed by the local authority. Eligible individuals may receive a cash benefit in order to employ necessary assistance. In order to qualify for this allowance, an individual must meet a given level of need.

Personal care (ADL) and practical assistance (IADL) are available to all dependent individuals without private co-payments.

Basically, all eligible individuals have free choice of care providers. Providers include senior citizen residences, gated communities, assisted living units, nursing homes and day-care centres for temporary assistance. Individuals generally pay the

rent for living in a non-profit or conventional nursing home.

As to the provision of care, local authorities and private providers supply services in a competitive framework defined by quality standards, and in some cases, price requirement.

Eligibility criteria and user choices: dependency, care needs, income

Eligibility is based on a needs' assessment which is performed by the local authority. There is no threshold / minimum dependency requested, neither for benefits in kind nor for benefits in cash.

Prevention and rehabilitation measures

Prevention and rehabilitation are a significant objective in Danish LTC policies. Local authorities are since January 2015 by law under the obligation to evaluate if the person in need of help could benefit from a rehabilitation scheme i.e. a training program focusing on regaining independence, functionality or physical functionality. The rehabilitation scheme is therefore offered to elderly citizens that are considered to be able to profit from this initiative.

Formal/informal caregiving

Even though most dependents in Denmark receive formal care, many family members provide valuable support to spouses and elder family members, especially those family members who suffer from dementia.

Recently legislated and/or planned policy reforms

A couple of initiatives have been developed recently, which are summarised below:

Agreement on "Future Home care". In 2014, the Danish Parliament presented the "Agreement on Future Home Care". Among other things the agreement strengthens the municipalities' rehabilitation efforts and the services they provide to frail, elderly people.

Transparency reform – greater focus on quality and results. The aim is to create greater and more systematic knowledge about quality and best

practice, improving accountability as well as achieving better management of the health care and long-term care system based on improvements in the overall health of the population, a high level of patient involvement and lower expenditure per capita. The accessible health data should provide a platform for transparency and dissemination of best practice as well as management and priorities in the health care sector on the basis of key goals and results.

Stronger health care agreements. Five health care agreements have been completed for 2015-2018 – one for each region – and they include new mandatory key action areas and specific objectives. Furthermore, across the boundaries of key action areas, the health care agreements aim to ensure focus on inequality in health and active involvement of patients and their relatives. The aim with the five health care agreements is to ensure coherence and coordination of efforts in the patient care that goes on across hospitals, general practice and municipalities so that each patient and citizen receives a treatment that is consistent and of high quality at the lowest effective cost.

National quality goals. The Government, Danish Regions and Local Government Denmark have set eight goals for the quality of the Danish health care. The national goals set a framework for the continuous quality improvement. The national goals are supported by a number of local goals and activities, which leads to local improvements. The national goals are part of a national programme to improve the quality in the health care system in Denmark. Beside the national goals, the quality programme consists of e.g. quality improvement teams, a national leadership programme and enhanced patient involvement and empowerment.

Better usage of telemedicine, health IT and digitalisation. There is a need for sweeping digitalisation of the health care and long-term care system where all procedures are supported digitally, where up-to-date patient information is shared by all relevant parties and where IT systems underpin better resource utilisation and efficient care pathways, both at the hospitals and in their cooperation with the rest of the system. In order to meet this need, the Government has presented a new overall digitalisation strategy for the health care and long-term care system.

Strengthening of professionalism in municipal nursing care. The Government intends to give the municipalities and municipal nursing care better and more systematic possibilities of utilising the professional competencies in general practice and at hospitals. In this way, professionalism will be strengthened in municipal nursing care through closer cooperation across hospitals, general practitioners and municipalities.

Ensuring stronger involvement of patients and their relatives. Active involvement of patients has a positive effect on both the results of treatment and the satisfaction of patients. Therefore, the Government will strengthen the involvement of patients and their relatives in the Danish health care and long-term care system. The Government intends to set up partnerships with, e.g., the Danish patient societies on the continued work to strengthen the involvement of patients and their relatives in the Danish health care and long-term care sector.

Strengthening initiatives aimed at citizens in need of rehabilitation. It is the Government's goal that all patients discharged from the hospital and with a need for rehabilitation receive the necessary and timely rehabilitation. This requires consistency in initiatives between the regions and the municipalities. The communication between hospitals and municipalities must be improved, e.g. through the rehabilitation plan, so the municipalities are able to have a better idea of the need of the individual citizen for rehabilitation. Therefore, the Government intends to enhance hospital competencies in terms of describing the need for rehabilitation of the group of patients with a comprehensive and complex need for rehabilitation.

An investment of the public health care. An ambitious, long-term strategy that is targeting on areas where the public health care need to be even better. The strategy focuses on five main elements: 1) cancer 2) chronic diseases 3) strengthening of general practitioners 4) involvement of patients and relatives 5) better quality in treatments.

National Action Plan for Dementia. The government and other political parties has agreed to allocate DKK 470 million (appx. €63 million) to the implementation of specific initiatives based on a new national action plan for dementia with the

aim of improving conditions for people living with dementia.

Challenges

Denmark provides for a comprehensive and structured LTC system, being at the forefront of many EU countries, in what concerns the efforts to continuously improve system performance; yet, cost issues are an element to be monitored closely in view of the increasing LTC expenditure. The challenges for Denmark appear to be:

- **Improving the governance framework:** to establish good information platforms for LTC users and providers; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care; To improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such

as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.

Table 3.7.1: Statistical Annex – Denmark

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	213	226	233	242	231	243	248	255	259	265	272	12,451	13,213	13,559	14,447
GDP per capita, PPS	32.8	34.2	34.7	33.9	31.7	32.9	33.3	32.9	33.0	33.6	34.8	26.8	28.1	28.0	29.6
Population, in millions	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.7	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	2.0	2.0	2.2	2.2	2.5	2.4	2.4	2.4	2.3	2.3	2.3	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	714.6	723.1	749.5	773.1	812.2	264.1	283.2	352.1	373.6
As % of total government expenditure	4.0	4.1	4.3	4.3	4.4	4.2	4.2	4.1	4.1	4.2	4.2	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	80.5	80.7	80.6	81.0	81.1	81.4	81.9	82.1	82.4	82.8	82.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.0	76.1	76.2	76.5	76.9	77.2	77.8	78.1	78.3	78.7	78.8	76.6	77.3	77.7	77.9
Healthy life years at birth for females	68.4	67.2	67.4	60.8	60.4	61.4	59.4	61.4	59.1	61.4	57.6	62.0	62.1	61.5	63.3
Healthy life years at birth for males	68.4	67.7	67.4	62.4	61.8	62.3	63.6	60.6	60.4	60.3	60.4	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	29.6	27.8	24.7	29.0	27.6	29.0	28.7	27.9	28.1	29.4	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	:	:	7.5	7.7	7.8	7.7	6.6	6.5	6.1	6.6	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	123	106	89	72	73	74	44	45	46	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	73	96	119	142	143	145	101	103	104	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	3.6	3.7	3.8	3.9	3.9	3.9	2.6	2.6	2.6	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	16	19	18	20	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	77	76	78	80	80	81	83	83	84	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.7.2: Statistical Annex - continued – Denmark

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	5.7	5.9	6.3	6.6	6.7	6.8	6.8	19%	2%
Dependency									
Number of dependents in millions	0.39	0.41	0.47	0.50	0.52	0.54	0.54	39%	25%
Share of dependents, in %	6.8	6.9	7.5	7.6	7.8	7.9	7.9	17%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	2.5	2.6	3.3	3.8	4.1	4.4	4.7	87%	73%
AWG risk scenario	2.5	2.7	3.7	4.6	5.4	6.3	7.3	190%	170%
Coverage									
Number of people receiving care in an institution	53,941	58,185	77,363	92,038	103,443	114,174	119,192	121%	72%
Number of people receiving care at home	106,256	115,027	150,164	171,703	189,293	205,204	215,215	103%	86%
Number of people receiving cash benefits	0	0	0	0	0	0	0	:	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	2.8	2.9	3.6	4.0	4.4	4.7	4.9	75%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	41.2	42.7	48.2	53.1	56.2	59.7	61.9	50%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	34.4	34.4	34.6	35.5	35.9	36.3	36.2	5%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	65.6	65.6	65.4	64.5	64.1	63.7	63.8	-3%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	92.8	92.1	92.3	95.3	94.8	95.1	98.3	6%	10%
Unit costs of home care per recipient, as % of GDP per capita	89.7	88.9	89.8	92.7	92.6	92.9	95.7	7%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	:	:	:	:	:	:	:	:	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.8. ESTONIA

General context: expenditure, fiscal sustainability and demographic trends

Estonia, the most northerly of the Baltic states has a GDP of 23.7 thousand PPS per capita, below the EU average of 30.0 thousand PPS per capita ⁽⁴⁶⁶⁾.

During the coming decennia the population will steadily decrease, from 1.3 million inhabitants in 2016 to 1.2 million inhabitants in 2070. Thus, Estonia is facing a considerable decrease of its population by 11%, while the EU average population is estimated to increase by 2%.

Health status

Life expectancy at birth for both men and women was estimated at respectively 73.2 years and 82.2 years in 2015 and is below the EU average (77.9 and 83.3 years respectively). Similarly, the healthy life years at birth for both sexes are 56.2 years (women) and 53.8 years (men) and substantially lower than the EU-average (63.3 and 62.6 respectively in 2015). The percentage of the Estonian population having a long-standing illness or health problem is considerably higher than in the Union (46.2% in Estonia versus 34.2% in the EU in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities decreased from 2006 to 2009, but has increased since 2010 and is again above the EU-average (10.4% against 8.1% in 2015).

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 0.13 million residents living with strong limitations due to health problems in 2016, an increase of 17% is envisaged until 2070 to 0.14 million. That is a less steep increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 9.6% to 12.6%, an increase of 31% (EU: 21%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a

percentage of GDP is steadily increasing. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.5 pps of GDP by 2070 ⁽⁴⁶⁷⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.8 pps of GDP by 2070. However, no sustainability risks appear over the short-term and risks over the medium and long run are low ⁽⁴⁶⁸⁾.

System Characteristics ⁽⁴⁶⁹⁾

The long-term care system in Estonia consists of nursing care and welfare.

LTC services can be split into community care services (where the recipient is supported while continuing to live in her/his own home) and institutional services (care is provided in a welfare institution). Local governments determine the basket of home services and the relevant conditions and procedures to obtain them. Municipalities also provide adequate housing for those who cannot afford it. Where necessary they also provide social housing or assist persons who need assistance with self-contained living, by adapting the dwelling or helping them find more suitable housing.

Fostering is also provided, care in a suitable family that the recipient is not a member of. This service is provided mainly for children and needs to be based on a written agreement between the caregiver (host family) and the local municipality.

Institutional care is provided in welfare institutions that provide the recipients who stay there with appropriate care according to their level of dependency and age. Services are provided according to principles and in the same manner as

⁽⁴⁶⁶⁾ Eurostat, 2017.

⁽⁴⁶⁷⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁴⁶⁸⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁴⁶⁹⁾ This section draws on OECD (2011b) and ASISP (2014).

they would be provided to recipients living at home.

To support informal care, a carer's allowance is paid by local governments to guardians or caregivers of disabled persons aged 18 years or above.

Public spending on LTC ⁽⁴⁷⁰⁾ reached 0.5% of GDP in 2016 in Estonia, below the average EU level of 1.6% of GDP. 45.1% of the benefits were in-kind, while 54.9% were cash-benefits (EU: 80 vs 20%).

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is higher in Estonia with 100%. Overall, 13.1% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, high coverage rates couple with low overall expenditure may imply a lack of focus in the provision of long-term care services, possibly calling for increased prioritisation. On the other hand low shares of coverage may indicate a situation of under-provision of LTC services.

The expenditure for institutional (in-kind) services makes up 59.2% of public in-kind expenditure (EU: 66.3%), 40.8% being spent for LTC services provided at home (EU: 33.7%).

Types of care

As explained in the previous section, long-term care is provided either at home or in institutional settings. The development of home nursing care (including home nurses and home nursing services) is still at an early stage and faces a large financing gap.

Care homes are not part of the health care system, and therefore do not in principle provide medical care to long-term care recipients. The latter therefore are visited by family doctors, and/or use private nursing companies.

In accordance with *Tervishoiuteenuste korraldamise seadus* (Act of Organisation of

⁽⁴⁷⁰⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

Health Services), nursing services include nursing healthcare services and are provided in home-based, day care and institutional settings. For more demanding cases of nursing care for the elderly, optional geriatric assessment has been available in Estonia since 2004.

The long-term care budget for the first half of 2013 was 23% higher year-on-year, a three times higher increase than for healthcare as a whole. The main drivers for this budget increase were increased investments into infrastructure supported by EU structural funds. Simultaneously, the number of long-term care cases financed by EHIF, has increased by 12% year-on-year. The availability of long-term care has significantly increased – the number of day care nursing home visits and the number of persons serviced increased by 8% and 11% respectively.

Eligibility criteria

Need for care is assessed by a local social worker, who will take into account the dependency needs and preferences of the potential recipient and their family. The need for nursing care is assessed by a doctor (whether a general practitioner or a medical specialist). The involvement of doctors is related only to the assessment of eligibility and not to the provision of long-term care itself.

An interdisciplinary assessment team performs the assessment of the recipient's level of dependency and, based on this, sets up a personalised nursing care plan. This team includes a physician specialised in geriatrics (geriatrician or an internist trained in geriatrics) as well as a nurse, a social worker and other relevant specialists.

Co-payments, out of the pocket expenses and private insurance

LTC services are financed by the municipalities, the budget of which mainly consists of a proportion of income taxes distributed to them by central government. Community care services do not usually require co-payment by the individual or his or her family. In institutional care homes, however, cost-sharing can amount up to 65% of the cost of provision (in general terms between €400 and €500), which is equivalent to 85% of the average pension. The government is however obliged as part of social assistance to cover the full

cost for recipients and their families when they are unable to pay.

Geriatric assessment and nursing care are generally covered for by the Estonian Health Insurance Fund (EHIF), which suggests a diverse funding scheme that goes beyond what is strictly healthcare. Limited local government and EHIF budgets lead to significant financial constraints for the service. Similarly, many welfare institutions and LTC are faced with a shortage of bed capacity and staff.

Although formally part of the healthcare sector rather than the long-term care sector, for nursing care a co-payment of 15% (some €6 per day) for inpatient long-term care was introduced from 1 January 2010 onwards. The aim was, in part, to restrict the use of hospital resources to those in need of medical treatment. This rate is however a ceiling, and many hospitals ask for lower co-payments, as the bed-day reimbursement from EHIF appears to be sufficient to cover more than 85% of the cost of provision.

Formal/informal caregiving

Informal care plays an important role in Estonia and this is recognised in legal terms. As explained above, local governments also provide a carer's allowance. The impact of the allowance in helping to reimburse care and alleviating the care burden of family members and allowing them to maintain their attachment to the labour market.

eHealth

The combination of long-term care and ICT has not been a major priority. There have been some pilot projects in the field of homecare but these are still at an early stage. Pilot projects currently are mostly concerned with either social care (Virtu) or secondary/tertiary care (DREAMING and Eliko).

Prevention and rehabilitation policies/measures

Neither prevention nor rehabilitation measures are defined as (part of) LTC in Estonia; i.e. prevention and rehabilitation are part of health care.

Recently legislated and/or planned policy reforms

In the recent past, there have been no significant legislative reforms in the field of long-term care. However, there have been some policy changes in this area. For instance, a 15% co-insurance rate was introduced in 2010 for inpatient nursing care. The aim of the plan was to involve patients in the financing of the LTC system. However, the plan met with resistance and was not implemented until tough austerity measures were adopted as a response to the financial crisis. As a consequence, EHIF expenditure budgeted for inpatient nursing care in 2011 fell by 4% lower expenditure in the planned EHIF budget for inpatient nursing care in 2011. However, the number of patients was 1% greater than planned. Additionally, EU structural funds aiming to strengthen infrastructure have been granted to LTC hospitals.

Interdisciplinary working groups are developing strategies for better integration of health care and social care (including LTC). Successful implementation will require consensus between the HC and LTC systems, as well as a supportive legislative framework.

Challenges

Estonia has taken significant steps to ensure the fiscal sustainability of LTC expenditure and increasing its availability. The main challenges of the system appear to be:

- **Improving the governance framework:** to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; to share data within government administrations to facilitate the management of potential interactions between

LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.

- **Improving financing arrangements:** to face the increased LTC costs in the future; to explore the potential of private LTC insurance as a supplementary financing tool; to determine the extent of user cost-sharing on LTC benefits.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, by setting a need-level triggering entitlement to coverage; the breadth of coverage, that is, by setting the extent of user cost-sharing on LTC benefits; and the depth of coverage, that is, by setting the types of services included into the coverage; to provide targeted benefits to those with highest LTC needs; to reduce the risk of impoverishment of recipients and informal carers.
- **Encouraging home care:** to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; monitoring and evaluating alternative services, including incentives for use of alternative settings.
- **Encouraging independent living:** to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care; to increase the retention of successfully recruited LTC workers, by improving the pay and working conditions of the LTC workforce, training opportunities, more responsibilities on-the-job, feedback support and supervision.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** to steer LTC users towards appropriate settings.
- **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.8.1: Statistical Annex – Estonia

GENERAL CONTEXT															
GDP and Population	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP, in billion euro, current prices	11	14	16	17	14	15	17	18	19	20	20	12,451	13,213	13,559	14,447
GDP per capita, PPS	18.7	19.5	19.8	18.3	15.8	16.5	17.6	18.1	17.9	18.4	18.8	26.8	28.1	28.0	29.6
Population, in millions	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	34.4	35.7	35.2	35.7	38.4	43.0	47.4	54.5	264.1	283.2	352.1	373.6
As % of total government expenditure	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	78.2	78.6	78.9	79.5	80.3	80.8	81.3	81.5	81.7	81.9	82.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	67.6	67.6	67.5	68.9	70.0	70.9	71.4	71.4	72.8	72.4	73.2	76.6	77.3	77.7	77.9
Healthy life years at birth for females	52.4	53.9	54.9	57.5	59.2	58.2	57.9	57.2	57.1	57.1	56.2	62.0	62.1	61.5	63.3
Healthy life years at birth for males	48.3	49.6	49.8	53.1	55.0	54.2	54.3	53.1	53.9	53.2	53.8	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	38.6	40.2	38.1	40.1	42.6	44.7	43.7	44.4	45.9	46.2	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	9.5	9.3	9.9	7.7	7.9	8.6	9.8	9.3	9.8	10.4	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
Coverage (Based on data from Ageing Reports)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Number of people receiving care in an institution, in thousands	:	:	4	5	6	8	8	8	15	16	16	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	6	8	10	12	12	12	6	6	7	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.7	1.0	1.2	1.5	1.5	1.5	1.6	1.7	1.7	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	21	18	16	15	14	14	13	13	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.8.2: Statistical Annex - continued – Estonia

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	1.3	1.3	1.3	1.3	1.3	1.2	1.2	-11%	2%
Dependency									
Number of dependents in millions	0.13	0.13	0.14	0.14	0.15	0.15	0.15	17%	25%
Share of dependents, in %	9.6	9.8	10.5	11.2	11.7	12.1	12.6	31%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	0.9	1.0	1.1	1.2	1.3	1.4	52%	73%
AWG risk scenario	0.9	1.0	1.3	1.7	2.2	2.9	3.8	321%	170%
Coverage									
Number of people receiving care in an institution	13,235	14,188	15,308	17,217	18,038	18,965	20,386	54%	72%
Number of people receiving care at home	25,836	26,791	28,341	30,031	31,500	32,292	33,098	28%	86%
Number of people receiving cash benefits	132,722	136,115	141,791	147,976	149,477	148,575	148,390	12%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	13.1	13.4	14.2	15.2	15.9	16.4	17.2	31%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	45.1	45.4	47.5	50.1	52.8	55.3	57.0	26%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	54.9	54.6	52.5	49.9	47.2	44.7	43.0	-22%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	59.2	60.1	60.0	61.1	60.8	61.1	62.0	5%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	40.8	39.9	40.0	38.9	39.2	38.9	38.0	-7%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	23.9	23.5	24.8	25.7	27.2	28.2	27.9	17%	10%
Unit costs of home care per recipient, as % of GDP per capita	8.4	8.3	8.9	9.4	10.0	10.5	10.6	25%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	4.9	4.9	4.9	4.9	4.8	4.8	4.7	-4%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.9. FINLAND

General context of long-term care system: expenditure, fiscal sustainability and demographic trends

Finland, member of the European Union since 1995, has a population of around 5.5 million inhabitants, which is slightly above 1% of the EU population in 2016 ⁽⁴⁷¹⁾. It is expected to reach 5.6 million in 2070, a demographic expansion of 2%. With a GDP of around 28,300 PPS per capita it is slightly below the EU average GDP per capita of 29,600 for the most recent year of 2015.

Health status

Life expectancy at birth for both men and women was, in 2015, respectively 78.7 years and 84.4 years and is above the EU average (77.9 and 83.3 years respectively). However, the healthy life years at birth for both sexes are 56.3 years (women) and 59.4 years (men) are below the EU-average (63.3 and 62.6 respectively), as measured in 2015. At the same time, the percentage of the Finnish population having a long-standing illness or health problem is far higher than in the Union as a whole (46.6% and 34.2% respectively in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities has decreased since 2004, and was lower than the EU-average in 2015 (7.6% against 8.1%).

Dependency trends

In terms of dependency, the number of people depending on others to perform daily activities is projected to grow from 0.40 in 2016 to 0.51 million in 2070, marking a 29% increase above the EU average increase of 25% for these years. The proportion of the dependents as a group in the whole population is also foreseen to increase from 7.2% to 9.0% in 2070, a change of 93% above the EU average increase of 73%.

Expenditure projections and fiscal sustainability

Long-term public spending on LTC is expected to rise over the course of the next 60 years ⁽⁴⁷²⁾. The AWG reference scenario displays an 93% rise in

expenditure from 2.2 in 2016 to 4.2 in 2070, with the EU averaging a 73% rise for those years. However the AWG risk scenario reveals a comparably flatter increase for Finland as the corresponding growth rate is below the EU average this time (131% vs. 171%). Expenditure is still expected to grow in this scenario from 2.2 in 2016 to 5.1 in 2070.

Finland does not appear to face fiscal sustainability risks in the short run. There are low fiscal sustainability risks in the medium term, but medium risks in the long term, primarily related to the projected ageing costs ⁽⁴⁷³⁾.

System Characteristics ⁽⁴⁷⁴⁾

Public spending on LTC ⁽⁴⁷⁵⁾ reached 2.2% of GDP in 2016 in Finland, above the EU average of 1.6% of GDP.

In Finland, 100% of dependents are receiving formal in-kind LTC services or cash benefits for LTC, far above the EU average of 50%. Overall, 10% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services (including sheltered housing with 24-hour assistance) makes up 21.1% of public LTC expenditure (EU: 66%), 79% being spent for LTC services provided at home (EU: 34%).

LTC policy is implemented both at local and national level. The main responsibility for the provision of LTC to elderly and disabled people, including rehabilitation, lies with the municipal authorities, their social welfare, health care service and service organisations. In contrast, at national level, the legislative framework contains the general conditions for the provision of services.

⁽⁴⁷¹⁾ This is according to the 2015 Eurostat projections.

⁽⁴⁷²⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁴⁷³⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁴⁷⁴⁾ This section draws on OECD (2011b) and ASISP (2014).

⁽⁴⁷⁵⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

The 303 municipalities have the responsibility to provide health and LTC services for residents. They may exercise this power on their own or in cooperation with other municipalities. As well as directly providing services, municipalities can also commission them from private or public service providers, or provide LTC recipients with service vouchers that can be used to directly purchase services from private providers.

Long-term care can be provided as home care, in the recipients' own homes or in sheltered housing units, as well as, as institutional care in residential institutions for and in the inpatient wards of health centres or hospitals.

Administrative organisation

Residence is the basis for entitlement to LTC services in Finland. Services and income security are provided as part of health and social care. It is the responsibility of municipalities to arrange the delivery of these services to recipients. An individual needs assessment is performed by the municipality to decide whether to grant services. As explained above, municipalities may provide the services directly or alternatively purchase them from other municipalities or private service providers.

Since 2011, recipients of LTC that have received care for more than a year have been granted the right to change the municipality that provides them LTC. The original municipality has to pay for the services arranged in the new municipality.

The municipality grants services on the basis of an individual assessment of needs. The needs must be assessed in a flexible manner, using reliable evaluation methods, and in cooperation with various actors. Based on the identified needs, a service plan is drawn up together with the person and, if necessary, a family member or a friend. After that, an administrative decision is made by a public servant concerning the services that the municipality is responsible for providing.

Types of care

Long-term care benefits are benefits in kind, except informal care support, which is a cash benefit. Benefits in kind include institutional care, home help, informal care support, day care, day

and service centres, sheltered housing and family care. The Social Security Institution (KELA) provides cash benefits. In long-term care, most important is the Care Allowance for Pensioners, a cash benefit that aims to support pension recipients with an illness or disability to continue living at home, as well as to help meet extra costs caused by illness or disability. The allowance is around EUR70/153/324 per month.

Home service and home nursing care support older people with their activities of daily living when they require help due to reduced functional capacity or illness. They are combined in many municipalities as home care and this is supplemented by additional support services.

If the older person is not able to live in his/hers own home or in sheltered accommodation (sheltered accommodation, service homes), care can be provided in an institutional care setting. Institutional care can be provided both in specialised nursing homes as well as in the inpatient departments of health care centres⁽⁴⁷⁶⁾. LTC can only be provided in an institutional setting if there is a medical justification or if there are other reasons why safe care for the recipient needs to be provided in an institution.

Informal care support is aimed at relatives with a caring responsibility for LTC recipients. Decisions on whether to grant informal care support are made by local authorities.

Eligibility criteria

The sections above have shown that Finland offers a very broad coverage to its citizens. For defining eligibility criteria, the country does not seem to have a general means-tested criterion (for either in-kind or cash benefit), with some discretion given to municipalities over fees and charges (see co-payments section below). In addition, users do have a discretionary use of cash benefits.

The health care system covers all residents of the country according to Section 19 of the Finnish Constitution. There is no single long-term scheme. Long-term care is provided through general social welfare and health care legislation which is supplemented by special legislation (for example

⁽⁴⁷⁶⁾ Usually reported as hospital beds in international statistics.

on services for older people and on services for people with disabilities). Municipalities are responsible for arranging social and health services that their population requires and as stipulated by legislation. Severely disabled persons have a subjective right to certain services under the Services and Assistance for the Disabled Act. .

As explained above, municipal authorities arrange social services for older people on the basis of an assessment of their individual needs by experts. Citizens above 75 years of age and pensioners on the highest rate of care allowance have the right to have their needs assessed within a specified period of time. The Social Welfare Act was amended in 2006 to include provisions on the municipalities' responsibility and expected delays for the needs assessment (in general within seven days or immediately for urgent cases). Once the need has been established, the municipal authorities in collaboration with the recipient and, if necessary their next of kin, draw up a personal care and service plan that details the services and support measures to be provided..

The Social Insurance Institution also grants care allowances for pensioners (around EUR70/153/324 per month) and disability allowances for children and adults (EUR92/215/416 per month). These allowances are not subject to means testing, but granted based on eligibility criteria according to the Disability Benefits Act. Recipients can also benefit from tax deductions for the purchase of home care. Conversion of homes to improve the ability of the recipient to perform daily tasks is also available from the public social welfare authorities in line with the Services and Assistance for the Disabled Act. Finally, repair of housing for the elderly and the disabled can also be supported due to social reasons by the housing authorities.

Co-payments, out of the pocket expenses and private insurance

Public LTC services are financed by municipal taxation as well as by central government subsidies and user fees (cost-sharing). While some services are provided free of charge (some services for people with disabilities), other services have a flat fee (some home care services) or are means-tested and determined according to income and family composition (for example for institutional care, which tends to be the costliest). However, the

current legislation also allows each municipality some degree of freedom to make their own choices in this field.

Role of the private sector

Private companies and non-profit organisations are important service providers in publicly funded LTC. With respect to housing services (service accommodation and institutional care), private organisations accounted for around 30 % of all clients in 2012, up from around 20 % in 2000. Private organisations primarily focus on serviced accommodation with almost all institutional care provided by municipalities. Finally, the role of the private sector in home help services is relatively minor.

Most of the private sector LTC services are commissioned by municipalities, i.e. selling of services to households directly plays a smaller role. The exception is home help services, although the purchase of these services by households is subsidised.

Formal/informal caregiving

Informal care support is targeted towards family members caring for a dependent relative (an aged spouse or parent, for example). Decisions on who receives informal care support are made by the municipalities.

Support for informal care includes caregiver's allowance, statutory leave for the caregiver (if the care is binding), necessary services to support the care-giver, and pension and accident insurance for the caregiver. The amount of the caregiver's allowance depends on the municipality, minimum EUR384.67 (in 2016) per month. Support from municipality requires an agreement between the informal caregiver and the municipality based on an individual service plan.

Prevention and rehabilitation policies and measures

Municipalities are in charge of health promotion and LTC prevention policies for the elderly. These include the provision of information on healthy lifestyles, the prevention of accidents and illness and early detection of reduced capacity to

function⁽⁴⁷⁷⁾. Many municipalities also provide a visiting service for elderly living at home, which includes a discussion on the challenges faced by the person and information on the public help available. Separately, each person over the age of 75 is entitled to a social-service needs assessment.

Rehabilitation of the elderly is carried out by the municipalities in co-operation with the Social Security Institution (Kela).

Recently legislated and/or planned policy reforms

On April 5 2016 the Finnish Government published its detailed position, which will guide the drafting of legislation on three interconnected reforms: (1) the reform of the organisation of health and social services, (2) the reform relating to freedom of choice and multisource financing, and (3) the regional government reform, i.e. the establishment of 18 independent counties governed by elected county councils.

The goals of these reforms are to (1) reduce the currently forecasted public finance sustainability gap by € billion by 2030, (2) guarantee equal access to high quality services everywhere in the country and (3) reduce health inequities.

The health and social reform is based on a client-centred integration of health and social services as the key measure for narrowing health and wellbeing disparities, improving the effectiveness of the services in an equal manner and bringing cost savings. A single strong organiser, county, will be responsible for services, steering, official activities, evaluation of regional impact, cost-effectiveness and quality services as well as supporting the users' freedom of choice. Freedom in the choice of choice of services, will enable users themselves to make choices between the providers.

The county will have a single budget and a single financial management and it will produce the necessary health and social services itself or together with other counties, or it may rely on private or third sector in the provision of services.

⁽⁴⁷⁷⁾ <http://www.thl.fi/fi/tutkimus-ja-asiantuntijatyo/tyokalut/iakkaiden-neuvontapalvelut-ja-hyvinvointia-edistavat-kotikaynnit>.

Counties will be financed by the central government and the current multisource financing will be simplified in later phases of the reform. The relevant perspectives of European Union law and the realisation of fundamental rights will be taken into account in the legislative drafting.

Counties will ensure that the organisation and provision of services are genuinely separated and performed by different organisations (legal persons). Freedom of choice will significantly promote competition in the provision of services. Integration of information systems will increase information flows between different providers. Consequently, the integration of service chains will improve. Essential public health functions, including health promotion and disease prevention, will be ensured.

The decision entails a major shift of paradigm and will require additional planning to that already carried out at earlier phases of the reform preparations.

The draft laws will be voted in the parliament in by the end of 2018 after the constitutional assessment. The new legislation is planned to come into force at the beginning of 2019. The new health and social care system itself, is due to commence on 1 January 2021. In preparation, the Government has introduced Bills to the parliament ranging from the Counties Act to the Freedom of Choice legislation. The latter is planned to come into force in stages during 2021-2023. An election of the county councils will follow in spring 2019. The voting in the Parliament is expected to be tight. If the laws are not accepted in the Parliament, the preparation of the reform continues during the next electoral period.

Successful and skilful change management will be a prerequisite for achieving the targets and thus will receive particular attention during the reform implementation.

Challenges

Finland has a comprehensive long-term care system that, in the last few years has been successful in increasing the proportion of care that is administered at home rather than in more expensive institutional settings. However, the high level of expenditure, the lack of means-testing and

the inequality in quality and access of services across municipal authorities mean there are still many challenges:

- **Improving the governance framework:** To establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities wrt. the provision of long-term care services; To set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; To strategically integrate medical and social services via such a legal framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; To use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; To deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** To explore the potential of private LTC insurance as a supplementary financing tool; To determine the extent of user cost-sharing on LTC benefits.
- **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the breadth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the depth of coverage, that is, setting the types of services included into the coverage; To provide targeted benefits to those with highest LTC needs.
- **Ensuring coordination and continuity of care:** To establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** To arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; To steer LTC users towards appropriate settings.
- **Changing payment incentives for providers:** To adapt provider payments for LTC away from the basis of salary; To consider fee-for-service to pay LTC workers in home-care settings and capitation payments; To consider a focused use of budgets negotiated ex-ante or based on a pre-fixed share of high-need users.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; To employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.9.1: Statistical Annex – Finland

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	164	173	187	194	181	187	197	200	203	205	210	12,451	13,213	13,559	14,447
GDP per capita, PPS	29.7	30.8	32.7	32.3	28.9	29.6	29.9	29.1	28.0	27.7	28.3	26.8	28.1	28.0	29.6
Population, in millions	5.2	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.5	5.5	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	1.1	1.1	1.2	1.2	1.4	1.3	1.4	1.5	1.5	1.4	1.3	1.1	1.2	1.2	1.2
Per capita PPS	290.2	310.8	355.9	369.5	377.9	378.9	416.3	445.2	436.0	431.5	419.6	264.1	283.2	352.1	373.6
As % of total government expenditure	2.3	2.3	2.5	2.5	2.5	2.4	2.6	2.6	2.5	2.4	2.3	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	82.5	83.1	83.1	83.3	83.5	83.5	83.8	83.7	84.1	84.1	84.4	82.6	83.1	83.3	83.3
Life expectancy at birth for males	75.6	75.9	76.0	76.5	76.6	76.9	77.3	77.7	78.0	78.4	78.7	76.6	77.3	77.7	77.9
Healthy life years at birth for females	52.5	52.8	58.0	59.5	58.6	57.9	58.3	56.2	:	57.5	56.3	62.0	62.1	61.5	63.3
Healthy life years at birth for males	51.7	53.2	56.8	58.6	58.2	58.5	57.7	57.3	:	58.7	59.4	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	43.3	41.7	40.6	42.8	44.0	45.4	46.7	47.5	46.1	46.6	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	12.0	8.8	7.8	8.0	7.9	7.7	7.1	:	7.5	7.6	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	50	69	88	107	109	112	51	52	54	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	56	60	63	67	68	70	159	162	165	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	2.0	2.4	2.8	3.2	3.3	3.4	3.9	3.9	4.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.9.2: Statistical Annex - continued – Finland

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	5.5	5.6	5.7	5.7	5.7	5.7	5.6	2%	2%
Dependency									
Number of dependents in millions	0.40	0.41	0.46	0.49	0.49	0.49	0.51	29%	25%
Share of dependents, in %	7.2	7.4	8.1	8.6	8.6	8.7	9.0	26%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	2.2	2.3	3.0	3.6	3.8	3.9	4.2	93%	73%
AWG risk scenario	2.2	2.4	3.2	3.9	4.2	4.5	5.1	131%	170%
Coverage									
Number of people receiving care in an institution	41,702	45,479	58,131	72,091	75,551	78,156	85,612	105%	72%
Number of people receiving care at home	182,750	196,666	246,044	297,865	309,747	316,836	344,914	89%	86%
Number of people receiving cash benefits	324,184	340,913	393,827	441,039	449,102	454,090	479,035	48%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	10.0	10.5	12.2	14.2	14.7	15.0	16.2	62%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	86.4	86.9	88.5	89.3	89.5	89.7	90.0	4%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	13.6	13.1	11.5	10.7	10.5	10.3	10.0	-26%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	21.1	20.9	20.6	20.5	20.5	20.5	20.4	-3%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	78.9	79.1	79.4	79.5	79.5	79.5	79.6	1%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	52.7	52.1	54.0	53.0	52.2	51.6	51.4	-3%	10%
Unit costs of home care per recipient, as % of GDP per capita	45.1	45.6	49.3	49.6	49.2	49.3	49.6	10%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	5.1	5.0	5.0	5.0	5.0	5.0	5.0	-1%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.10. FRANCE

General context: Expenditure, fiscal sustainability and demographic trends

France, had in 2016 a population of almost 66.8 million inhabitants, which is expected to grow by 15% up to 77 million by 2070, above the EU overall growth of 2%. With a GDP of more than €2,194 bn in 2015, or 29,200 PPS per capita, it is slightly below the EU average GDP per capita of €29,600 PPS.

Health status

Life expectancy at birth for both women and men was, in 2015, respectively 85.5 years and 79.2 years and is above the EU average (77.9 and 83.3 years respectively). In 2015, the healthy life years at birth for both sexes were 64.6 years (women) and 62.6 years (men) significantly above the EU-averages (63.3 and 62.6 respectively). At the same time, the percentage of the French population having a long-standing illness or health problem is higher than in the Union as a whole (37.5% versus 34.2% in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities was in 2015 8.8%, slightly above the EU-average (8.1%).

Dependency trends

The share of dependents is set to increase in this period, from 9% in 2016 to 10.6% of the total population in 2070, an increase of 17%. This is lower than the EU-average increase of 21%. From 6 million residents living with strong limitations due to health problems in 2016, an increase of 35% is envisaged until 2070 to 8.2 million. That is a steeper increase than in the EU as a whole (25%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.8 pps

of GDP by 2070 ⁽⁴⁷⁸⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 1.1 pps of GDP by 2070. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure.

France faces low fiscal sustainability risks in the short run. There are high risks for the country from debt sustainability analysis in the medium term, but the contribution of health care and long-term care is relatively small. Finally, according to the new risk classification assessment of the 2018 Fiscal Sustainability Report, long-term risks are medium ⁽⁴⁷⁹⁾.

System Characteristics ⁽⁴⁸⁰⁾

France is a unitary state subdivided in administrative areas (departments). Public provision of long-term care is organised as a two-pronged system. On the one hand, the public health insurance scheme – providing universal population coverage – covers the cost of health care provided in institutions to the recipients of care (including the dependent elderly or disabled patients). It also funds LTC units in hospitals, as well as nursing care provided directly in the patient's home. These health care costs are paid for by the health insurance scheme and patients do not need to pay for these services themselves.

On the other hand, there are two schemes, that are mainly financed by local authorities and that provide social benefits to the dependents (whether elderly or disabled) in order to help them meet part of the cost of care not covered by health insurance, whether that care is provided in an institutional or domiciliary setting: the "Prestation de compensation du handicap" (PCH - Disability compensation benefit) and the " L'Allocation personnalisée d'autonomie " (APA - Personalised Autonomy Benefit), briefly described below.

⁽⁴⁷⁸⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁴⁷⁹⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁴⁸⁰⁾ This section draws on OECD (2011b) and ASISP (2014).

Public spending on LTC ⁽⁴⁸¹⁾ reached 1.7% of GDP in 2016 in France, close to the EU average of 1.6% of GDP. 93.8% of public LTC expenditure was spent on in-kind benefits (EU: 84.4%), while 6.2% were provided via cash-benefits (EU: 15.6%).

In France, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC, in-line with the EU average of 50%. Overall, 3.6% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 94% of public in-kind expenditure (EU: 66%), 6% being spent for LTC services provided at home (EU: 34%). Thus, relative to other Member States France has a focus on institutional care, which may be inefficient, as institutional care is relatively costly with respect to other types of care.

Administrative organisation

As explained above, the public provision of long-term care relies on a two-pronged system. The cost of health care is financed by the public health insurance scheme, while social benefits provided by two schemes (PCH and APA) are essentially financed by the State and by local authorities. The PCH and the APA are provided by departments (local authorities).

Types of care

The range of types of care available is very large. It comprises help with daily activities (cooking, cleaning and laundry, etc.), help with personal activities (bathing, getting dressed, etc.).

A dependant or disabled person can also receive a benefit specifically aimed to adapt their home to their level of need (stair lift, walk-in bathtub, etc.)

⁽⁴⁸¹⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

and any charge due to their situation in relation to four activities: mobility, personal care, communication and capacity to protect themselves and to control their environment.

All of these can be provided either at home or in institution.

Eligibility criteria

In general, in the basic health care insurance system cost-sharing applies to most goods and services, especially primary care and specialist consultations. Some specific categories are exempted from cost-sharing. The private voluntary complementary health insurance increases the rate of reimbursement, reducing the discrepancy between the actual amount paid by patients and the amount they are reimbursed by their social health insurance fund. In doing so, complementary health insurance reduces the ability of cost-sharing to control overconsumption, as it renders users less cost-aware. As a result, the authorities implemented a ticket, and a “deductible” that are not covered by complementary health insurance. According to the ticket system implemented in 2005 the patient has to pay €1 for each physician visit and each biomedical analysis. The so-called medical deductible has been implemented since 2008. The patient has to pay €0.50 per drug box, €0.50 on each paramedical procedure and €2 for each medical transport.

As most EU countries, France does allow for users to have a discretionary use of cash benefits. Discretionary use may not necessarily lead to the most cost-effective use of cash resources, especially if the use of cash benefits is not monitored, although it does allow flexibility to compensate informal carers.

The PCH is available for the disabled under 60. The dependent above 60 receive the APA, which is based on an assessment of a person's needs. As mentioned above, the APA benefit amount varies both according to the person's level of dependency (established by a socio-medical team, using a nation-wide unified grid – the AGGIR grid – which identifies 6 levels of dependency, with only the first 4 levels being taken into account for the granting of the APA benefit) and according to the elderly's financial resources.

Co-payments, out of the pocket expenses and private insurance

For the disabled under 60, a new benefit is in place from January 2006, the PCH. It is intended to help cover the needs of the disabled person regardless of whether those needs have to do with labour market attachment, home adaptation, human and technical aids, etc. Average monthly spending per recipient is €800.

From age 60 onwards, the dependent elderly – at home or in an institution – can receive the APA, a universal benefit for people over 60 that was established in 2002. This benefit is calculated on the basis of a "help plan" designed for each individual according to an assessment of their needs. The APA benefit is intended to cover part of the cost of the "help plan", with the rest (on average about one quarter of the total amount) being paid by the beneficiary through user fees which increase in proportion to their income. Recipients with an income below €800.53 per month do not pay these fees. The benefit amount thus depends on both the person's level of dependency as well as on the recipient's financial resources. The level of dependency is established by a socio-medical team, using the unified AGGIR grid.

The APA is administered by the relevant local departments, which cover around two third of its cost, with the rest being financed by the National Solidarity Fund for Autonomy (CNSA). The average amount of the "Help plan" granted to home care recipients care is around €482 per month, of which about a fifth (€94 on average) is covered by cost-sharing. The amount provided through the "Help plan" varies depending on the level of dependency from €342 to €991 per month.

France is one of the leading markets in terms of the proportion of its population that is covered by private LTC insurance. In 2012, 18% of the population aged over 40 years had private LTC coverage⁽⁴⁸²⁾. Indemnity policies are the most frequent type of private coverage arrangement. Under this model the insured typically pay annual

⁽⁴⁸²⁾ Private insurances in France often include long-term care coverage as part of a larger package. In 2016, private expenditure on LTC accounted for 17% of overall expenditure on LTC.

fees in exchange for a determined future stream of income in case they become dependent.

Role of the private sector

Care for disabled people is provided almost exclusively by the public sector, although the private sector plays an increasing role in old-age LTC: a third of health expenditure for older people (including, home care and hospitals) is for care provided in a private institution (profit making: 14% of the total; non-profit making: 19% of the total). Among all institution for older people, A quarter of all institutions providing care for older people are private profit-making institutions.

Formal/informal caregiving

In 2003, about 75% of APA recipients received care from a family member. The majority of informal carers were women (62%, average age of 58 years old). Only about 10% of informal (family) carers are paid through APA.

In terms of the balance of care and work activities, informal carers who are in employment have the right to take 3 months of unpaid leave (up to 1 year over their career) to care for a dependent. There are also specific tax reductions available for carers.

Prevention and rehabilitation policies/measures

Prevention and rehabilitation are managed by the public health system.

Recently legislated and/or planned policy reforms

A reform for "the adaptation of society to ageing" was adopted by the Parliament by the end of 2015 and came into force in 2016.

This reform (€645 million) was financed by the Additional Solidarity Contribution for Autonomy (CASA) introduced in 2013.

375 million euros were spent on the APA benefit in order to help the elderly remain longer in their own homes. The amount of the APA benefit was thus raised by €400 for the most dependent patients, and by €150 for the least dependent patients. Furthermore, the amount of co-payment

(ticket modérateur) was reduced by up to 80% in some cases.

25 million euros were also be devoted to improving the wages of the low-waged domiciliary care providers.

Informal care is supported by the 2015 bill, thanks to new financing and the creation of a “trusted person” accompanying the dependent person.

Finally, the bill also supports carers:

- It creates a new status and training for people helping a dependent relative;
- It gives them a “respite assistance”, i.e. a replacement while they take a “break” or in the case of an hospitalisation.

To promote data sharing amongst public administrations, the “loi de modernisation de notre système de santé”, promulgated in January 2016, creates a new database called « système national des données de santé » (article 193). It will contain data on the disabled and the elderly.

140 million euros were spent on subsidising technical aids to help the elderly, and especially those with most modest incomes, to remain longer at home.

80 million euros were devoted to adapt private housing to the needs of dependent people and to renovate intermediary forms of homes – named “autonomy residences” - for the elderly, who need help but not to the extent that they need to be in a nursing home.

Regulations on private dependency insurances were also introduced, as well as special help for informal carers (up to 500 euros per year in order to cover the cost of some time off).

In May 2018, a roadmap on elderly LTC has been announced by the government:

- On prevention: a universal free health check at the time of retirement as well as financing prevention in institutions;

- In order to improve the care pathway of elderly people, funding will be granted to institutions to improve general access to telemedicine;
- Promote home care: €100 M granted to home care to businesses in the sector to deploy themselves between 2019 and 2020;
- Upgrade care quality in institutional care: €500 M plan to insure care is delivered properly in care institutions and €100 M a year starting in 2019 in order to boost investment in institutional care.
- A broad consultation “Grand Âge et Autonomie” (Ageing and Autonomy) was carried out and a summary of the results were published in a report (“Rapport Libault”), proposing a set of reforms to improve LTC policies. The French government will draw upon these propositions in order to present a reform of LTC policies in autumn 2019. This reform will address a number of the challenges listed below.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** To establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities wrt. to the provision of long-term care services; To set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; To strategically integrate medical and social services via such a legal framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; To deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** To face increased LTC costs, choices will be made to define the balance between public and private financing and between generations”.

- **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the breadth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the depth of coverage, that is, setting the types of services included into the coverage; To provide targeted benefits to those with highest LTC needs; To reduce the risk of impoverishment of recipients and informal carers.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care.
- **Ensuring coordination and continuity of care:** To establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** To steer LTC users towards appropriate settings.
- **Changing payment incentives for providers:** To consider a focused use of budgets negotiated ex-ante or based on a pre-fixed share of high-need users.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; To invest in ICT as an important source of care management and coordination.

Table 3.10.1: Statistical Annex – France

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	1,772	1,853	1,946	1,996	1,939	1,998	2,059	2,087	2,115	2,148	2,194	12,451	13,213	13,559	14,447
GDP per capita, PPS	28.2	28.6	29.2	28.1	26.7	27.5	28.0	27.9	28.2	28.6	29.2	26.8	28.1	28.0	29.6
Population, in millions	62.8	63.2	63.6	64.0	64.4	64.7	65.0	65.3	65.6	65.9	66.5	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	1.0	0.9	1.0	1.0	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.1	1.2	1.2	1.2
Per capita PPS	:	242.7	259.0	274.2	293.0	309.4	321.2	334.7	350.4	360.2	374.3	264.1	283.2	352.1	373.6
As % of total government expenditure	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.2	2.3	2.1	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	83.8	84.5	84.8	84.8	85.0	85.3	85.7	85.4	85.6	86.0	85.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	77.3	77.6	77.8	78.0	78.2	78.7	78.7	79.0	79.5	79.2	76.6	77.3	77.7	77.9
Healthy life years at birth for females	64.6	64.4	64.4	64.5	63.5	63.4	63.6	63.8	64.4	64.2	64.6	62.0	62.1	61.5	63.3
Healthy life years at birth for males	62.3	62.8	62.8	62.8	62.8	61.8	62.7	62.6	63.0	63.4	62.6	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	34.4	33.7	36.7	37.0	36.9	36.5	36.6	36.5	37.0	37.5	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.3	6.1	8.6	9.0	9.6	9.3	8.8	9.1	9.2	8.8	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	552	532	511	491	507	523	854	868	881	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	521	657	792	928	947	966	1,089	1,103	1,118	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.7	1.9	2.0	2.2	2.2	2.3	3.0	3.0	3.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	2,102	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.10.2: Statistical Annex - continued – France

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	66.8	68.0	70.7	73.0	74.4	75.6	77.0	15%	2%
Dependency									
Number of dependents in millions	6.04	6.28	6.96	7.65	7.97	8.12	8.18	35%	25%
Share of dependents, in %	9.0	9.2	9.9	10.5	10.7	10.7	10.6	17%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.7	1.8	1.9	2.3	2.4	2.4	2.4	37%	73%
AWG risk scenario	1.7	1.9	2.2	3.0	3.5	4.0	4.5	160%	170%
Coverage									
Number of people receiving care in an institution	1,099,785	1,147,950	1,265,516	1,541,487	1,689,683	1,764,289	1,766,791	61%	72%
Number of people receiving care at home	1,207,470	1,261,995	1,446,938	1,713,034	1,846,969	1,903,213	1,909,968	58%	86%
Number of people receiving cash benefits	711,232	706,575	720,262	711,268	711,653	718,154	722,835	2%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	4.5	4.6	4.9	5.4	5.7	5.8	5.7	26%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	50.0	49.6	49.3	51.9	53.3	54.0	53.8	8%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	93.8	94.3	95.4	96.7	97.4	97.8	98.1	5%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	6.2	5.7	4.6	3.3	2.6	2.2	1.9	-69%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	66.9	66.7	65.6	64.4	63.8	63.7	63.7	-5%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	33.1	33.3	34.4	35.6	36.2	36.3	36.3	9%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	66.3	66.3	67.6	67.3	65.9	64.7	65.0	-2%	10%
Unit costs of home care per recipient, as % of GDP per capita	29.9	30.1	31.0	33.6	34.1	34.2	34.2	14%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	10.1	9.7	8.7	7.8	6.7	5.7	4.8	-52%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.11. GERMANY

General context: Expenditure, fiscal sustainability and demographic trends

GDP per capita in PPS is at €33,200 and above EU average of €29,600 in 2015. Germany has a population of 82.7 million inhabitants. During the coming decennia the population will steadily decrease, from 82.1 million inhabitants in 2016 to 79.3 million inhabitants in 2070 depending on the migration rate. Thus, Germany is facing a decrease of its population by 3%, while the EU average population is estimated to increase by 2%.

Health status

Life expectancy at birth for both women and men is respectively 83.1 years and 78.3 years in 2015 and is around the EU average for women and men (83.3 and 77.9 years respectively). Healthy life years at birth in 2015 are with 67.5 years (women) and 65.3 years (men) above the EU-averages (63.3 and 62.6 respectively). The percentage of the German population having a long-standing illness or health problem is higher than in the Union (42.5% in Germany versus 34.2% in the EU). The percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 7.1%, which is lower than the EU-average (8.1%); however, it should be noticed that these figures are based on self-reported indicators and therefore can be influenced among others by cultural factors.

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 7.0 million residents living with (self-assessed) strong limitations due to health problems in 2016⁽⁴⁸³⁾, an increase of 8% is estimated until 2070 with nearly 7.6 million⁽⁴⁸⁴⁾. That is a less steep increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 10.0% to 11.7%, an increase of 17% (EU: 21%).

⁽⁴⁸³⁾ The number of dependent population is estimated for those insured under social health insurance only.

⁽⁴⁸⁴⁾ According to the AWG report the robustness of dependency rates calculated on the basis of the EU-SILC survey has been improved, by using a 5-year average (where available) of the dependency rates for each of the age-gender groups.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing in most scenarios. In the "AWG reference scenario", public long-term expenditure⁽⁴⁸⁵⁾ is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.9 pps of GDP by 2070⁽⁴⁸⁶⁾.

The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, the latter being dependent on self-assessed measure people experiencing severe limitations in daily activities, projects an increase in spending of 3.4 pps of GDP by 2070. Overall, projected long-term care expenditure increase for these two scenarios is expected to add to budgetary pressure. However, no fiscal sustainability risks appear over the long run as the favourable initial budgetary position would mitigate the projected increase in age-related expenditure⁽⁴⁸⁷⁾.

In Germany, currently long-term care benefits are indexed to prices. To account for this legislation and the financial precaution principle while preserving the realism of the projections, in the displayed scenarios 2/3 of the public expenditure on in-kind benefits are indexed to GDP per hours worked and 1/3 of the cash benefits to GDP per capita.

System Characteristics

Social long-term care insurance (LTC) insurance is compulsory. All members of the social health insurance are covered by the public and members of the private health insurance (PHI) are covered by the private LTC insurance. Both parties are entitled to the same benefits, which is basically

⁽⁴⁸⁵⁾ Public expenditure on LTC in Germany refers to the Statutory Health Insurance Funds only.

⁽⁴⁸⁶⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁴⁸⁷⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

covering a portion of long-term nursing care costs. If costs of care exceed benefits, the person in need of care has to bear the difference, also including support from their children or near relatives, or ultimately social assistance.

Premiums for social LTC insurance are calculated as a fixed proportion of the labour income (2.55% for insured with and 2.80% for insured without children in 2017). Employers bear one half of it and children and spouses with no substantial individual labour income are co-insured without extra costs. Private LTC insurance premiums are related to (income independent) premiums of PHI.

Since 2012, employees with a family member in need of home care are entitled to reduce their weekly working time to 15 hours for up to two years. Their employers can top up the reduced salary by half of the difference between old and new salary with an interest free credit from the *Kreditanstalt für Wiederaufbau*. Afterwards, the employee has to work full-time until the credit is paid back. The uptake of this policy was very low so far.

For informal carers getting sick or taking holidays, LTC insurance pays benefits for up to six weeks of respite care or eight weeks short-term residential care, but not more than €1,612 each once a year. This is conditional on the informal carer having taken care of the recipient for at least six months prior to application. Also, benefits for people with dementia have been increased. An additional optional private LTC insurance is now subsidised with a maximum of €60 per year.

Public spending on LTC ⁽⁴⁸⁸⁾, encompassing expenditure of statutory health insurances only, reached 1.3% of GDP in 2016 in Germany, below the average EU level of 1.6% of GDP ⁽⁴⁸⁹⁾. The share of the in-kind benefits was 67.7%, while 32.3% were cash-benefits (EU: 84.4% vs 15.6%). Private co-financing of formal LTC services is important in Germany. According to 2016 Eurostat

⁽⁴⁸⁸⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

⁽⁴⁸⁹⁾ This is according to the Ageing Report 2018. Due to agreements taken with the Member States delegates in the AWG-EPC, definition of LTC expenditure may deviate from expenditure levels as reported in other publications.

data, 29% of expenditure on LTC services are co-financed privately, either through a voluntary insurance scheme or out-of-pocket payments.

In the EU, 50% of self-perceived dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 54.7% higher in Germany. Overall, 6.4% (including disabled persons) of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional services makes up 70.7% of public LTC expenditure on in-kind services (EU: 66.3%), 29.3% being spent for LTC services provided at home (EU: 33.7%). Thus, relative to other Member States Germany seems to might have some potential to focus more on home care, which may be more cost-efficient. As institutional care is relatively costly, Member States with shares well above the EU levels may benefit from efficiency gains by shifting some coverage (and thus expenditure) from institutional to other types of care.

Types of care

Recipients of LTC services can choose between cash benefits, home care (in-kind), and institutional care. Cash benefits allow recipients to live at home and be taken care of typically by their relatives. Home care (in-kind) allows for a professional care, paid directly by the recipients to the providers. Institutional care refers to either short-term or long-term stay in a nursing home.

Eligibility criteria and user choices: dependency, care needs, income

The LTC insurance has defined five degrees of care based on the assessment of independence and abilities. Factors included in the assessment are mobility, cognitive and communicative abilities, self-supply, illness or therapy related activities, daily life and social contacts. Recipients in need of care should/must be insured for at least six months prior to the application of care allowance. Eligibility and the level of care are assessed by an

independent Medical Review Board of the Statutory Health Insurance Funds (*MDK*) for the social LTC insurance or an equivalent body for the private LTC insurance.

Prevention and rehabilitation measures

Since 2016 social LTC insurance contributes to the prevention efforts in institutions of the health insurance with estimated €1 million each year; the amounts in the following years depend on the reference figure and the number of recipients of formal care in institutions. Rehabilitation measures are not defined as (part of) LTC in Germany; i.e. rehabilitation is part of health care.

Recently legislated and/or planned policy reforms

The Ministry of Health has improved LTC with three interlaced laws strengthening long-term care (*Pflegestärkungsgesetz [PSG] I-III*). PSG I has significantly increased services for dependants from January 2015 onwards and has increased the number of caregivers in institutional care; besides that a LTC provident fund for demographic sustainable financing has been introduced.

PSG I-III increased LTC premiums in two steps by 0.5 pps starting from 2015 (0.3 pps in 2015 and 0.2 pps in 2017). From the additional revenues, €1.3 billion will be transferred yearly to the LTC provident fund until 2034. The remaining €3.7 billion per year will be spent on additional and improved services for dependents (services will increase by 20%) ⁽⁴⁹⁰⁾. As of 2019, LTC premiums will be increased by 0.5 pps to strengthen measures of the care personnel law (*Pflegepersonal-Stärkungsgesetz*).

PSG II and III were introduced within the legislature period 2013-2017. PSG II redefines care levels and care assessment methods based on individual care demands; especially dementia is now part of the assessment. PSG III strengthens the local coordination and provision of care and focuses on counselling.

⁽⁴⁹⁰⁾ Source:

<https://www.bundesgesundheitsministerium.de/service/gesetze-und-verordnungen/guv-18-lp.html>.

In order to make the job of formal carers more attractive and to increase the quality of care, the government has passed the carer education law (*Pflegeberufsgesetz*) ⁽⁴⁹¹⁾.

As described in the preceding sections, new measures have also been taken recently to strengthen prevention.

Challenges

Germany has taken significant steps to establish a coherent financing mix, ensure the fiscal sustainability of LTC expenditure and provide adequate coverage to the population. The main challenges of the publicly funded LTC system appear to be:

- **Improving the governance framework:** to establish good information platforms for LTC users and providers.
- **Encouraging independent living:** to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care; to improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers.
- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** to create better rules, improving (and securing) safe care

⁽⁴⁹¹⁾ Source:

<http://www.bmg.bund.de/ministerium/meldungen/2016/160113-pflegeberufsgesetz.html>.

pathways and information delivered to chronically-ill people or circulated through the system.

- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.11.1: Statistical Annex – Germany:

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	2,301	2,393	2,513	2,562	2,460	2,580	2,703	2,758	2,826	2,932	3,044	12,451	13,213	13,559	14,447
GDP per capita, PPS	29.1	30.2	31.5	31.3	28.9	30.5	31.9	32.1	31.7	32.6	33.2	26.8	28.1	28.0	29.6
Population, in millions	82.5	82.4	82.3	82.2	82.0	81.8	80.2	80.3	80.5	80.8	81.2	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.3	1.1	1.2	1.2	1.2
Per capita PPS	281.6	286.7	298.7	305.8	318.6	343.0	365.0	387.7	405.8	428.0	464.9	264.1	283.2	352.1	373.6
As % of total government expenditure	2.2	2.2	2.3	2.3	2.3	2.4	2.5	2.6	2.7	2.7	2.9	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	82.0	82.4	82.7	82.7	82.8	83.0	83.1	83.1	83.1	83.6	83.1	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	77.2	77.4	77.6	77.8	78.0	77.9	78.1	78.4	78.7	78.3	76.6	77.3	77.7	77.9
Healthy life years at birth for females	54.8	58.3	58.6	57.7	58.1	58.7	58.7	57.9	57.0	56.5	67.5	62.0	62.1	61.5	63.3
Healthy life years at birth for males	54.5	58.7	59.0	56.4	57.1	57.9	57.9	57.4	57.8	56.4	65.3	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	38.2	37.9	35.3	35.2	35.2	35.4	35.7	36.8	37.2	42.5	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	8.3	8.2	10.6	10.1	10.2	10.0	10.9	10.4	10.7	7.1	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	561	610	658	707	726	743	740	751	764	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	1,028	1,188	1,349	1,509	1,537	1,565	348	352	358	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.9	2.2	2.4	2.7	2.8	2.9	1.4	1.4	1.4	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	3,256	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	628	:	695	:	746	:	792	:	864	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.11.2: Statistical Annex - continued – Germany

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions*	82.1	83.8	84.6	84.1	82.7	80.8	79.3	-3%	2%
*Note: The LTC projections are based on the SHI insured part of the population									
Dependency									
Number of dependents in millions	7.04	7.31	7.61	7.76	8.11	7.72	7.61	8%	25%
Share of dependents, in %	10.0	10.2	10.7	11.1	11.9	11.7	11.7	17%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.3	1.5	1.7	1.8	2.0	2.0	1.9	48%	73%
AWG risk scenario	1.3	1.6	1.9	2.3	2.8	3.1	3.4	164%	170%
Coverage									
Number of people receiving care in an institution	775,005	833,929	979,597	1,060,364	1,278,885	1,313,781	1,300,496	68%	72%
Number of people receiving care at home	379,049	404,324	453,139	493,629	557,253	545,339	549,287	45%	86%
Number of people receiving cash benefits	1,595,152	1,701,518	1,906,949	2,077,347	2,345,098	2,294,958	2,311,576	45%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.9	4.1	4.7	5.2	6.1	6.3	6.4	64%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	39.0	40.2	43.9	46.8	51.5	53.8	54.7	40%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	67.7	68.1	69.8	71.0	72.5	73.9	74.8	10%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	32.3	31.9	30.2	29.0	27.5	26.1	25.2	-22%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	68.2	68.3	69.1	69.1	70.1	71.1	70.7	4%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	31.8	31.7	30.9	30.9	29.9	28.9	29.3	-8%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	53.9	59.2	58.4	57.8	54.2	52.0	50.3	-7%	10%
Unit costs of home care per recipient, as % of GDP per capita	51.5	56.8	56.4	55.7	53.0	51.1	49.4	-4%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	18.3	19.9	18.8	17.4	16.0	14.8	13.5	-26%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.12. GREECE

General context: Expenditure, fiscal sustainability and demographic trends

Greece has a population of around 10.9 million, projected to decrease by 29% by 2070 and to reach 7.7 million. With a GDP of around €80 billion or 21,158 PPS per capita, it is below the EU average GDP per capita of 29,610 PPS, slowly increasing after the significant contraction recorded in the post-crisis years. Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part) (1) is, with 0.1 % of GDP in 2016, below the EU average in the same year (1.6%).

Health Status

Life expectancy at birth for women and men was, in 2015, respectively 83.7 and 78.5 years, close to the EU average (83.3 and 77.9 years respectively). In 2015, the healthy life years at birth were 64.1 years for women and 63.9 years for men, slightly above the EU-average (63.3 and 62.6 respectively). The percentage of the Greek population having a long-standing illness or health problem was lower than in the Union as a whole (23.6% and 34.2% respectively in 2015). However, in the same year, the percentage of the population indicating a self-perceived severe limitation in its daily activities was 10.8%, above the EU-average (8.1% in 2015).

Dependency Trends

The number of people depending on others to carry out activities of daily living is projected to rise over the next decades up to 2070. The number of people living with strong limitations due to health problems in 2016 were estimated at 1.12 million and an increase by 3% is expected by 2070, bringing this number to approximately 1.16 million⁽⁴⁹²⁾. The corresponding EU change for that period is 25%. Moreover, dependents are also projected to increase as a share of the population, from 10.4% to 15.1%, a rise of 45%, more than double the EU growth over the same period (21%).

⁽⁴⁹²⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

Expenditure projections and fiscal sustainability

Based on the "AWG reference scenario", the current value of public expenditure on long-term care (health) as a percentage of GDP is projected to grow from 0.1 in 2016 to 0.2 in 2070, a difference of 76% which is slightly above the EU for the same period (73%). According to the "AWG risk scenario", which also captures non-demographic cost drivers, expenditure is foreseen to increase from 0.1 in 2016 to 4.9 in 2070. This corresponds to a bigger projected change, 3.8 pps of GDP, corresponding to an increase of 4834%, well above the EU average of 170% over the same period⁽⁴⁹³⁾⁽⁴⁹⁴⁾.

System Characteristics

In Greece, there is no universal statutory scheme for long-term care and there is a mixed landscape of services provided by public entities, private for-profit and non-profit entities and families.

Traditionally, long-term care was provided by the family, and only when the family was not able to care for the dependent or to afford alternatives, the solution would be institutionalisation. In the 1980s the state began the process of recognition of the specificities of long-term care as a separate item from primary care or secondary care, with the aim of allowing for the non-institutionalisation of the elderly who were in general good health but still required some sort of regular assistance or support. This was implemented through KAPIs ('Open Protection Centres for the Elderly'). During the decade, local authorities worked towards the expansion of this network relying on public funding, reaching the 1000 centres over the territory, a number that fell since 2016 and currently stands at 750 centres. However, coverage was not even and there was a substantial degree of inequality in access to services over the territory and lack of quality assessment based on the

⁽⁴⁹³⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁴⁹⁴⁾ Greece has just completed the third adjustment programme monitored by the EU, the IMF and the ECB. The medium- and long-term fiscal sustainability indicators S1 and S2 point to remaining challenges to ensure future fiscal sustainability (European Commission (2018), Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_1.pdf).

intended goals. In the 1990s, a project to deliver community and home care through the network of KAPIs was initiated under the programme Help at Home and was run by the local authorities across Greece. This programme, though very popular, never managed to achieve the necessary coverage due to funding issues.

The result is that of a currently highly fragmented system with uneven coverage across users and low coverage overall. Due to the great fragmentation of the system and limited coverage, a large share of service provision is left to informal care, with primary responsibility for the financial and practical support of dependants resting firmly on the family.

Administrative organisation

According to official statistics, long-term care beds in nursing and residential care facilities for every 100,000 inhabitants were amongst the lowest in the EU in 2015 ⁽⁴⁹⁵⁾. This issue is paired with an uneven distribution of available services, mostly located in the areas of Athens and Thessaloniki ⁽⁴⁹⁶⁾.

The state provides both direct and indirect support, the former through social services, the latter through social security funds and allowances or tax reductions. Public formal long-term care is financed by the Ministry of Health, the Ministry of Labour Social Security and Social Solidarity (MoLSSSS), and also by EFKA, the unified agency for social insurance. Formal services mainly consist of institutional/residential care and community-based services ⁽⁴⁹⁷⁾.

The delivery of community and home care, in the form of help with activities of daily living, is currently provided by local authorities, based on directives and legal framework provided by the MoLSSSS. and, informally, is left to the patient's network (mostly the family). Other (non-contributory) disability benefits (in cash and in

kind) are provided by the social welfare system to persons who are in need of care because of a specific chronic illness or incapacity.

Available formal long-term care services (Help-at-Home, Day Care Centres, Care units for the chronic sick and limited public Residential Care Homes - MFI) are financed through the competent local authorities, the state budget, frequently co-financed through European Funds (currently the ESF) and are free to the user. Public nursing homes for the chronically ill are financed by the state budget through 13 regional Social Welfare Centres (public entities operating under the supervision of MoLSSSS) and by per diem fees paid by EFKA and EOPYY ⁽⁴⁹⁸⁾.

Dependent on the level of invalidity, the state, through these Social Welfare Centres, provides residential care to the indigent and the elderly who are alone and in need of care through chronic illness nursing homes plus nursing homes for disabled persons, with a capacity of approximately 1.800 beds. These, however, are not targeted at the elderly as only three centres have a proper geriatric section. On top of those within public nursing homes, there is an additional capacity of approximately 3000 long-term beds within other settings, namely acute and psychiatric hospitals (1000 and 2000 beds respectively). Additional beds are available within private structures.

In general, public residential and semi-residential care for disabled adults and children and for indigent people above 65 who lack a social network to rely on for their care is provided through the above mentioned regional Social Welfare Centres, financed by the state budget, supervised by the MoLSSSS and by per diem fees paid by EOPYY. These 13 regional Centres plus one dedicated to the children protection ran 51 'social care units in 2018 . Overall, the social care units include 22 chronic illness nursing homes for disabled adults and old people, 23 social protection centres for children, 6 rehabilitation centres for disabled persons and there are 4 other relevant structures (all legal entities of public law).

⁽⁴⁹⁵⁾ See Eurostat [hlth_rs_bdsns]. However, these are not comparable with other Member States as Greece does not report figures for the majority of NUTS2 regions, only two being covered in the dataset.

⁽⁴⁹⁶⁾ Ziomas D., Konstantinidou D., Vezyrgianni K., Capella A. (2018), ESPN Thematic Report on Challenges in long-term care – Greece 2018, European Social Policy Network.

⁽⁴⁹⁷⁾ Ibid.

⁽⁴⁹⁸⁾ Ziomas D., Konstantinidou D., Vezyrgianni K., Capella A. (2018), ESPN Thematic Report on Challenges in long-term care – Greece 2018, European Social Policy Network.

MoLSSSS is currently running deinstitutionalisation (DI) projects for disabled persons through the regional Social Welfare Centers. The two first projects of this kind are running in Western Greece (aiming to the closure of the nursing home in Lechaina), and in the region of Attica. DI projects include a broad range of actions (e.g. supported housing, special educational and training programmes, hiring expertise specialised carers etc.), to move beneficiaries from closed care institutions to their place of residence as well as to establish a community-based services network for supporting living in the community and preventing institutionalisation.

A broader DI National Strategy for the Welfare sector, including children and the elderly, has been also under construction by the MoLSSSS. The strategy includes a 2019-2023 Action Plan for providing community based services and preventing institutionalisation.

Several private clinics operate under a contract with EOPYY to provide long-term care, indeed, based on data from the Eurofound⁽⁴⁹⁹⁾, it seems that more than 95% of the care homes are of private ownership, with slightly more than half being non-profit and the rest for-profit. All the long-term care units (public and, for-profit and non-profit private ones amount to approximately 250 and account for a total of approximately 12000 to 15000 long-term care beds. Non-profit care homes tend to provide nursing care services and are partly subsidised by the state, and partly funded by donations (and per diem fees paid by the social insurance organisation for those entitled to social insurance). For-profits are financed by the beneficiaries and seem to have put a greater focus on specific issues such a dementia and rehabilitative services.

Day-care to the elderly is provided by the 62 Day Care Centres for the Elderly (KIFI). Since their establishment they have been funded mostly through EU resources, dedicated to the strengthening of services of semi-residential care,

⁽⁴⁹⁹⁾ Eurofound (2017), Care homes for Older Europeans: Public, for-profit and non-profit providers, Publications Office of the European Union, Luxembourg, <https://www.eurofound.europa.eu/printpdf/publications/report/2017/care-homes-for-older-europeans-public-private-and-not-for-profit-providers>.

both for the elderly and for the disabled, and of home care. Currently KIFIs are funded by the European Social Fund, through the Operational Programmes of the 13 regions of Greece.

As with the centres of day care, the Help at Home programme (introduced in 1998), operated by municipal enterprises, has been initially funded by EU resources (European Social Fund until 2015), but has been since then administrated by the local authorities funded for this purpose by the state budget. In the past, the insufficient criteria to contain expenditure undermined the viability of service provision, especially in the case of Help-at-Home. In December 2018, new adopted legislation⁽⁵⁰⁰⁾ secured the permanent nature of the programme Help-at-Home in the local authorities and subsequently its funding by the state budget. The necessary procedures to hire carers under open-end contracts are currently running according to the rules of the Supreme Council for Civil Personnel Selection (ASEP).

At present, there are 860 ‘Help at Home’ schemes in operation, run by 282 agencies (municipalities, municipal enterprises, non-profit organisations, etc.) and providing services to about 71,563 beneficiaries⁽⁵⁰¹⁾. Lastly, some outpatient services are provided by rehabilitation centres.

Types of care

Public services include Help-at-Home, KAPIs (KΑΠΗ-Open Care Centres for Older People, i.e. local community day centres), public residential care homes for older people, Day-Care Centres for Older People (ΚΗΦΗ, providing day care for dependent older people with no family or while their family carers are at work), Centres for chronic diseases and rehabilitation.

The MoLSSSS started setting up a new administrative scheme, named OFILI (Integrated Care for the Elderly) in order to link, monitor and coordinate the three existing forms of care for the elderly (KAPIs, KIFIs, Help-at-Home). This scheme has been designed to be part of the Community Centres’ platform and thus extending

⁽⁵⁰⁰⁾ Article 91 of Law 4583/2018 (Gov.Gaz.A’212).

⁽⁵⁰¹⁾ Ziomas D., Konstantinidou D., Vezyrgianni K., Capella A. (2018), ESPN Thematic Report on Challenges in Long-term care – Greece 2018, European Social Policy Network.

possibilities for better targeting and adequate coverage of those in need ⁽⁵⁰²⁾.

Private for-profit sector's services in the long-term care system include: residential care homes (MFI), care workers at home (often migrants), medical care (private medical care).

Private non-profit include services and programmes run by NGO's, charity and philanthropic organisations, churches and their branches and privately funded foundations These include: NGO's for special groups, NGO's of older people, NGO's as service providers and NGO's combating social exclusion ⁽⁵⁰³⁾ ⁽⁵⁰⁴⁾.

Eligibility criteria

Admissions to state operated care centres for the chronically ill, which, however, hardly cover the needs among deprived elderly people, and to contracted non-profit and for-profit clinics are subject to referral by the social services of local authorities, of "regional units" (ex-prefecture level social welfare directorates), of the NHS hospitals and quite often by the local state prosecutors acting in defence of the best interest of those people. Existing legislation does not define a specific income threshold. It rather stresses that economic hardship is a crucial criterion, but other factors defining the severity of need should be taken into account too in the evaluation of each specific case.

Dependent on invalidity levels as assessed by the Centres for Certifying Incapacity (KEPA), and

based on the kind of chronic illness, recipients are entitled to different levels of care provision. The invalidity levels are set at 50%, 67% or 80%.

Co-payments, out of the pocket expenses and private insurance

There are no comprehensive formal long-term care services guaranteeing universal coverage nor any specific budget allocated to long-term care services. Existing services are addressed to the neediest, indigent people. Care for the chronically ill (either in state residential units or contracted non-profit and for-profit care centres and clinics) is limited. This means that in many circumstances care must be financed privately.

Private insurance for long-term care is negligible and the cost of private residential care, by those who can afford it, is met by out-of-pocket payments. In semi-private clinics, services of rehabilitation and nursing for older people may benefit from partial coverage by the social security funds, but this is a time limited (up to 6 months) and small share of the total expenditure which mainly burdens the beneficiary. Consequently, over the last few years occupancy of private for profit care homes has significantly fallen from 100% to about 80%.

In addition, due to the crisis and economic hardship families opt to look after the elderly at home as pension benefits are a major source of income particularly among households with low work intensity.

Formal/informal care giving

Although some formal care is provided, informal care giving is still an important part of the Greek long-term care system. Due to the traditional central role of the family as a provider of elderly care, and to the financial hardship and lack of supporting private provision, families are increasingly resorting to the use of migrant carers. These are typically hired to look-after the elderly and often live with them, providing 24-hour care, and they are entirely financed by the patient or his network.

⁽⁵⁰²⁾ Community Centres are structures designed by the MoLSSSS as both "one-stop-shop" and "on the field" spots of the National Mechanism for Monitoring, Coordinating and Evaluating All Social Inclusion and Social Cohesion Policies. Their purpose is to inform citizens about services and programmes they are entitled to and assist them in getting access to them. Community Centres are operating as part of the social services of the local Municipalities and will be funded by ESF through Regional Operational Programmes up to 2023 (then anticipated to be fully integrated to municipalities' social services).

⁽⁵⁰³⁾ Mastroiannakis, T., Kagiolaris, G., Triantafillou, J.: "The role of informal care in long-term care", Greek National Report (2010), http://interlinks.euro.centre.org/sites/default/files/WP6_EL_NRP_final.pdf.

⁽⁵⁰⁴⁾ Due to the uncharted constellation of these entities, the law 4455/2017 (art.7, Gov.Gaz. A'22) established a compulsory procedure for registering in an electronically run National Registry. Approximately 6.000 entries have been recorded until December 2018.

Prevention and rehabilitation policies/ measures

Three types of rehabilitation centres, recently transferred under the responsibility of the Ministry of Health and managed by ESY hospitals, provide outpatient long-term care services (Centres for Further Therapy and Rehabilitation of the Disabled, Centres for Physical and Medical Rehabilitation; and the so-called KEKYKAMEA - Centres for Education, Training and Social Support to Disabled Persons). Prevention is a rather neglected policy area.

Recently legislated and/or planned policy reforms

In 2010, the Kallikratis plan transferred social care to local authorities, which have so far been unable to integrate services into a comprehensive package ensuring coverage to the citizens. In 2011, Law 4025 has redesigned the map of welfare organisations over the territory through a consolidation and stipulated the systematic registration of recipients of service benefits into a unified electronic database. The following year, Law 4052 has explicitly linked AKAGE's⁽⁵⁰⁵⁾ resources to the additional purpose to support the Help at Home programme, on top of its mandate to cover future pension deficit. AKAGE has covered the cost of the programme up to end 2018. An element of novelty within this version of the Help at Home is that the criteria of eligibility are clearly defined based mainly on means testing.

Another important feature was the introduction of competition among providers. Alongside municipal schemes, non-profit as well as for-profit Help-at-Home units would be able to submit bids for being included in the registry of certified providers in the schemes administered by EFKA from which beneficiaries would be able to choose a provider. Those working in municipal schemes would be able to form “social cooperatives” and bid for becoming accredited providers under the new, competitive system. However, due to strong stakeholder opposition, the implementation of these changes is weak and progresses with slow pace.

In December 2018, Law 4583 enabled Municipalities having participated so far in the programme Help-at-Home to include these services in their social structures' regular activities and hire staff. Necessary procedures are already applied so that municipalities hire permanent staff upon open-end contract and include their payroll in their annual budget.

Recent policy measures adopted by Law 4445/2016 and Law 4455/2017 provide for the creation of an official registry of all agencies (public and private) that provide long-term care (as part of the broader range of social and welfare services), the establishment of a national registry of private non-profit providers of social care services.

In addition, Law 4520/2018 establishes a single welfare benefits authority, named OPEKA (Organisation for Welfare Benefits and Social Solidarity) which is in charge of achieving better coordination, improving transparency, removing the red tape and developing more effective, efficient and coherent policies for vulnerable groups. OPEKA is currently fully operational and has undertaken the payment of disability welfare benefits, family benefits, school meals, special allowance for the uninsured elderly and special aid to victims of fires in Attica and soon it will manage the Social Solidarity Income (a GMI scheme) programme too.

Further, the National Observatory for Alzheimer's and Dementia was created in 2014 and paired with the adoption of an action plan in 2016 to also strengthen support to this part of the population with the creation of special care units, such as day-care centres, for persons suffering from such diseases, and by envisaging measures to support their carers. Another important step could be represented by the, establishment of an institutional setting for the provision of 'Integrated Care for the Elderly'. According to recent announcements by the Minister of Social Solidarity, this would currently be in the pipeline and the outcome could reduce the fragmentation of the existing care services for the elderly (open protection centres for the elderly (KAPI), KIFI and

⁽⁵⁰⁵⁾ AKAGE: Security Fund for Intergenerational Solidarity.

the ‘Help at Home’ programme) by increasing their coordination ⁽⁵⁰⁶⁾.

According to the MoLSSSS the national deinstitutionalisation strategy, including the 2019-2023 Action Plan for deinstitutionalisation projects and the provision of community based services preventing institutionalisation is due to be filed by first semester of 2019.

A legislative framework related to the general rules of social protection provision to the populations as well as a law ruling the management, functioning and financing of social care institutions are also going to be filed in the Parliament in the near future.

Challenges

Greece, despite recent efforts, has a highly fragmented and unstructured system of long-term care, with relatively low coverage and high reliance on informal care. The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities wrt. the provision of long-term care services; to strategically integrate medical and social services via such a legal framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC

coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits and the scope of coverage, that is, setting the types of services included into the coverage; to reduce the risk of impoverishment of recipients and informal carers.

- **Improving financing arrangements:** To determine the extent of user cost-sharing on LTC benefits; following the interconnection of programmes platforms ⁽⁵⁰⁷⁾, to continue the centralised means-testing to determine individual cost-sharing (or entitlement to public support) so that, while accounting for the economic context, it guarantees a uniform and equal treatment to all citizens, it captures different income components, including benefits, and it also captures wealth in the form of assets.
- **Encouraging independent living:** to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer’s allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, while at the same time ensure that the payment systems and financial incentives discourage acute care use for LTC.

⁽⁵⁰⁶⁾Ziomas D., Konstantinidou D., Vezyrgianni K., Capella A. (2018), ESPN Thematic Report on Challenges in long-term care – Greece 2018, European Social Policy Network.

⁽⁵⁰⁷⁾Cf the programmes’ platforms of the Social Solidarity Income, the Social Divident 2017 and 2018, the Child Benefit, the Housing Benefit.

- **Improving value for money:** to encourage competition across LTC providers to stimulate productivity enhancements. To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and coordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.
- **Improving administrative efficiency.**
- **Ensuring good budgeting practices.**

Table 3.12.1: Statistical Annex – Greece

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	199	218	233	242	238	226	207	191	181	179	176	12,451	13,213	13,559	14,447
GDP per capita, PPS	25.1	26.3	26.0	25.2	23.2	21.5	19.6	19.0	19.5	20.5	21.2	26.8	28.1	28.0	29.6
Population, in millions	11.0	11.0	11.0	11.1	11.1	11.1	11.1	11.1	11.0	10.9	10.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	0.0	0.1	0.0	0.0	0.1	0.0	0.0	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	8.3	11.0	6.3	7.8	8.8	5.5	7.0	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	82.5	82.7	82.5	83.0	83.3	83.3	83.6	83.4	84.0	84.1	83.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.8	77.1	76.9	77.5	77.5	78.0	78.0	78.0	78.7	78.8	78.5	76.6	77.3	77.7	77.9
Healthy life years at birth for females	67.4	68.1	67.6	66.2	66.8	67.7	66.9	64.9	65.1	64.8	64.1	62.0	62.1	61.5	63.3
Healthy life years at birth for males	65.9	66.5	66.0	65.6	66.1	66.1	66.2	64.8	64.7	64.1	63.9	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	20.3	21.7	22.2	22.1	22.8	23.4	23.8	23.9	24.1	23.6	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.1	6.8	8.2	8.0	8.1	8.6	10.1	10.8	11.4	10.8	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	66	83	100	117	121	125	4	5	5	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	148	177	205	234	239	244	10	11	11	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.9	2.3	2.8	3.2	3.2	3.3	0.1	0.1	0.1	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	273	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.12.2: Statistical Annex - continued – Greece

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	199	218	233	242	238	226	207	191	181	179	176	12,451	13,213	13,559	14,447
GDP per capita, PPS	25.1	26.3	26.0	25.2	23.2	21.5	19.6	19.0	19.5	20.5	21.2	26.8	28.1	28.0	29.6
Population, in millions	11.0	11.0	11.0	11.1	11.1	11.1	11.1	11.1	11.0	10.9	10.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	0.0	0.1	0.0	0.0	0.1	0.0	0.0	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	8.3	11.0	6.3	7.8	8.8	5.5	7.0	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	82.5	82.7	82.5	83.0	83.3	83.3	83.6	83.4	84.0	84.1	83.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.8	77.1	76.9	77.5	77.5	78.0	78.0	78.0	78.7	78.8	78.5	76.6	77.3	77.7	77.9
Healthy life years at birth for females	67.4	68.1	67.6	66.2	66.8	67.7	66.9	64.9	65.1	64.8	64.1	62.0	62.1	61.5	63.3
Healthy life years at birth for males	65.9	66.5	66.0	65.6	66.1	66.1	66.2	64.8	64.7	64.1	63.9	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	20.3	21.7	22.2	22.1	22.8	23.4	23.8	23.9	24.1	23.6	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.1	6.8	8.2	8.0	8.1	8.6	10.1	10.8	11.4	10.8	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	66	83	100	117	121	125	4	5	5	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	148	177	205	234	239	244	10	11	11	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.9	2.3	2.8	3.2	3.2	3.3	0.1	0.1	0.1	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	273	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.13. HUNGARY

General context: Expenditure, fiscal sustainability and demographic trends

Hungary has a population estimated at around 9.8 million inhabitants in 2016, and it is projected to fall down to 8.9 by 2070. With a GDP of around €11 bn, or 17,200 PPS per capita, it is below the EU average GDP PPS per capita of 29,600.

Health status

Life expectancy at birth for both men and women was, in 2015, respectively 72.3 years and 79.0 years and is below the EU average (77.9 and 83.3 years respectively). The healthy life years at birth for both sexes are 60.1 years (women) and 58.2 years (men) are also below the EU-average (63.3 and 62.6 respectively). At the same time, the percentage of the Hungarian population having a long-standing illness or health problem is far higher than in the Union as a whole (39.4% and 34.2% respectively in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities has decreased since 2004, and is similar to the EU-average (8.1% against 8.1% in 2015).

Dependency trends

The share of dependents is expected to increase in this period, from 9% in 2016 to 11.5% of the total population in 2070, an increase of 28%, which is above the EU average increase of 21%. From around 0.89 million residents living with strong limitations due to health problems in 2016, an increase of 15% is envisaged until 2070 to 1.02 million. That is below the increase in the EU as a whole (25%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care (LTC) as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.4 p

of GDP by 2070. ⁽⁵⁰⁸⁾ The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 4.1 pps of GDP by 2070.

Hungary faces low fiscal sustainability risks in the short run. In the medium and long term the fiscal sustainability risks are high, but the contribution of health care and long-term care is relatively low ⁽⁵⁰⁹⁾.

System Characteristics ⁽⁵¹⁰⁾

Public spending on LTC ⁽⁵¹¹⁾ reached 0.7% of GDP in 2016 in Hungary, below the EU average of 1.6% of GDP. 100% of the benefits were in-kind, with no expenditure on cash benefits (EU: 84 vs 16%).

35.5% of dependents are receiving formal in-kind LTC services or cash benefits for LTC, below the EU average of 50%. Overall, 4.3% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 68% of public in-kind expenditure (EU: 66.3%), 32% being spent for LTC services provided at home (EU: 39%).

Long-term care is generally seen as a relatively small section of the social protection system in Hungary. However, over the last five years a rapid shift to publicly-financed home based care has taken place.

⁽⁵⁰⁸⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁵⁰⁹⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁵¹⁰⁾ This section draws on OECD (2011b) and ASISP (2014).

⁽⁵¹¹⁾ Long-term care benefits can be disaggregated into health-related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

Hungary has no stand-alone LTC system. Instead, LTC services are provided either by the health care system or by the social care system. The two systems have a different legislation, financing mechanisms and services. They each have parallel institutional networks that include institutional and home care. There is only weak coordination between them despite some minor recent improvements due to the merging of the health care and social affairs portfolios under the supervision the Ministry of Human Resources.

Until recently the LTC system was still shaped by the organisational logic of central planning: centralisation (as fewer institutions are easier to control), a preference for institutionalised care versus home-based care and a lack of awareness beyond its immediate operational sphere. The main consequence was a dual structure consisting of a centralised institutional supplemented through the informal behaviour of individual and households. However, this has recently changed with a shift towards more home care.

Health care system provides nursing care in nursing departments of hospitals and home nursing care. Hospitals have nursing / chronic beds (determined by law) for those who are in need of long-term nursing. Tasks of these department or services: help in stabilising and improving health conditions, alleviation of pain, and supporting relatives for participation in home care. The social care system provides three main types of services: home care (including “meals-on-wheels” services), day care and residential care.

The LTC-system does not offer cash benefits for recipients to improve access to care. There is only one type of social allowance, the nursing fee, for those relatives with caring responsibility for a disabled family member.

Beyond this, the bulk of LTC provision is left to private households or the informal market.

Administrative organisation

Home care is organised at a local level, whether by social work centres, homes for elderly or special institutions. In general, the financial system of public LTC functions as a direct subsidy to suppliers of care. Services include help with daily activities supervision, social assistance and

medical services. Home health care is organised by community nurses. Additionally, there also some day-centres and transitional accommodation.

Types of care

Long-term care in Hungary includes benefits in kind (institutional or home care) as well as one cash benefit (nursing fee, as explained above). The provision of LTC is regulated by legislation on social security, such as health care and health insurance, pension and disability insurance and social assistance. As shown in the statistical annex, most services are currently provided in an institutional setting.

Eligibility criteria, co-payments, out of the pocket expenses and private insurance

As explained above, the nursing fee is a social allowance provided to carers. Applications need to be based on the expert opinion of the GP treating the dependent person. Since January 2013 they can be submitted directly to the district office. The fee is paid to carers who provide LTC for severely disabled family members (including both the elderly as well as the severely disabled permanently ill young (minor) family members). In this way, the nursing fee is not only targeted to LTC of the elderly. Additionally, the social legislation allows local governments to give financial help to those caring for permanently ill family members aged over 18 but under 65.

Apart from these cash benefits services are funded directly. Private insurance schemes are not involved in the funding of LTC. The operational costs of providing LTC are financed by the "Health Insurance Fund" for health care and the central government budget for the social care component of LTC.

In addition, care providers are allowed to charge user fees. The exact amount charged differs depending on the service. The regulations stipulate algorithms that take into account the personal income and real state assets of the recipient but do neither include other assets nor the availability of informal family carers. The fee can go up to 80% of monthly income for institutional care and 50 % for group homes for rehabilitation. Besides these according to the different providers the maximum fees are the following: for day care: max. 15% of

monthly income; for day care + meals: max 30% of monthly income; for temporary care: max. 60% of monthly income).

Unit costs of both residential and home care are low in comparison with the rest of the EU. In 2012 the financial support for residential care for a year was HUF 635,650, about €2,200, around 22% of per capita annual GDP. In 2013 the method of calculation has changed. In contrast to the "per resident quota" in effect till 2012, since then the average wage of carers in residential homes is regulated by the government. The normative support per resident can be calculated according to further rules on residents per carer, with special multipliers for care intensity (1.0 for regular elderly homes, 1.18 for dementia care and 0.19 for special elderly care). As a consequence, the quota for regular care has increased slightly up to HUF 651,510, (about €2,255 per annum). For home care, the corresponding figure was HUF 166,080, around €575 or about 6% of per capita GDP, in 2012, cut back to HUF 145,000 (around €490) in 2013.

Formal/informal caregiving

There is empirical evidence showing that family relations play a relatively important role in LTC for the elderly in Hungary. The 4th wave of SHARE (Survey of Health, Ageing and Retirement in Europe), for the first time including Hungary, found that the elderly in Hungary are by far the most likely to name their offspring among the confidants they can rely on and the second most likely to name their spouses (Stoeckel and Litwin 2013). Additionally, the majority are women (the highest proportion within the OECD).

Prevention and rehabilitation policies/measures

Prevention and rehabilitation are provided through the health care system.

Recently legislated and/or planned policy reforms

Modification of the responsibility of institutions providing permanent accommodation and care

In the "Act III. of 1993. on Social Administration and Social Benefits" (regulates the responsibility of operate of social services. Before the enactment of the act, the responsibility for ensuring services providing LTC belonged to county authorities and local authorities of cities with county rights. The state took over the social institutions of county authorities in 2012 during a process of its debt consolidation. In parallel the legislative responsibility of operating institution providing long term care became the responsibility of the state.

The takeover process of residential social institutions took place in 2013, as the legislative responsibility of maintaining of residential institutions to people with disabilities, psychiatric patients and people with addictions became the responsibility of the state from 1 January 2013. Simultaneously therefore all institutions which earlier were maintained by local authorities were taken over by the state. The takeover gives opportunity for reforming of these institutions and for rationalising the available capacities and for ensuring an efficient and qualitative service.

Local authorities may continue to organise residential care service for elderly at a local level. For towns with county rights, and for the capital it is still a binding duty.

Replacement of social institutional capacities providing nursing and care for people with disabilities and supported living

In July 2011, the Hungarian Government adopted the Government Decree No. 1257/2011. (VII.21.) on the strategy for the replacement of social institutional capacities providing nursing and care for people with disabilities 2011-2041 (hereinafter: DI strategy) and the implementation of governmental tasks. The main goal of the deinstitutionalisation is to ensure the full enjoyment of human rights, to increase the quality of life of persons with disabilities and at the same

time to develop and modernise the structure of the provision of social services.

For the purpose of implementing the targeted developments and conversions in the first three-year period of the 30-year-long strategy, a tender of the Social Infrastructure Operational Programme (TIOP 3.4.1. A-11 'Replacement of residential institutions – social institutions component') was launched with the overall amount of HUF 7 billion. In the first two phases of the tender, six projects were submitted. Four of them were related to care homes for disabled persons and two of them to psycho-social care homes. The total amount of support received by the applicants is almost HUF 6 billion (€19,344,327).

The operators who applied for subsidies for deinstitutionalisation had to clearly blueprint the implementation of the transformation of their institutions and services before its beginning; demands and needs of every service user had to be measured; the process of their preparation for changes and the structures of the tailor made services had to be designed.

The "National Body for Deinstitutionalisation" (hereinafter called: the Body) was established to overview and approve the feasibility studies on the basis of the principles and objectives of the deinstitutionalisation (DI) strategy. The Body outlines preliminary professional evaluation criteria by submitting professional proposals on the feasibility studies. The Body determines the order of the implementation and takes part in the monitoring of the development. Furthermore, the Body makes comments on the concept of utilisation of the infrastructure remaining after the deinstitutionalisation process indicated in the proposals and outlines the Action Plan for restructuring the institutions in every three years. The Body ensures the full transparency of the implementation of the strategy. Persons with disabilities, civil services, advocacy groups, representatives of social and higher education, institutions of special education, other background institutions, service providers and senior civil servants take part in the activity of the Body.

The network of mentors set up by the support of the European funds is also important for the success of the implementation by ensuring counselling on the questions of replacement and by

giving preparatory support for inquiring organisations.

The DI strategy is also promoted by the Social Renewal Operational Programme (TÁMOP 5.4.1/12 'Modernisation of social services') by giving communicational support for a more effective social inclusion.

In order to establish the legislative background of the strategy, supported living was introduced from 1 January 2013 as a new form of social services in the Act III of 1993 on Social Administration and Social Benefits.

Supported living is a flexible combination of various forms of housing and supportive services, where the housing and supportive services are separated from each other. The supported living service provides appropriate conditions for people with disabilities, psychiatric patients, persons with addictions and homeless people concerning housing and social services in accordance with the beneficiaries' age, health condition and self-care skills. The provided service is based on complex needs assessments (taking into account the necessary intensity of support, the existing abilities and the users' will) and it is modified in parallel with the possible changing circumstances.

The service provides: housing/living service; care management; support for follow up the persons' living conditions based on personal needs assessments; meals; nursing and care; development/rehabilitation, and services to help participation in social life.

After 1 January 2013, new institutional places providing nursing and care for people with disabilities, psychiatric patients or people with addictions can be established: a) In the case of large institutions only by providing supported housing; b) in the case of creating new institutions which can only be set up in houses described by legislative regulations on supported housing (flat for maximum 6 people or house for maximum 7-12 people).

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** To establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities wrt. to the provision of long-term care services; To strategically integrate medical and social services via such a legal framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; To set guidelines to steer decision-making at local level or by practising providers; To use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; To share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; To deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** To foster pre-funding elements, which implies setting aside some funds to pay for future obligations; To explore the potential of private LTC insurance as a supplementary financing tool; To determine the extent of user cost-sharing on LTC benefits.
- **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, by setting: (i) the need-level triggering entitlement to coverage; (ii) the breadth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and (iii) the depth of coverage, that is, setting the types of services included into the coverage; To reduce the risk of impoverishment of recipients and informal carers.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** To establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** To establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; To steer LTC users towards appropriate settings.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; To invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; To employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.13.1: Statistical Annex – Hungary

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	91	92	102	108	94	99	101	100	102	106	111	12,451	13,213	13,559	14,447
GDP per capita, PPS	17.7	17.8	17.5	17.4	16.1	16.5	16.8	16.5	16.5	16.7	17.2	26.8	28.1	28.0	29.6
Population, in millions	10.1	10.1	10.1	10.0	10.0	10.0	10.0	9.9	9.9	9.9	9.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.1	1.2	1.2	1.2
Per capita PPS	:	35.3	40.5	42.6	40.9	44.3	42.9	41.2	46.4	52.0	51.2	264.1	283.2	352.1	373.6
As % of total government expenditure	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	77.2	77.8	77.8	78.3	78.4	78.6	78.7	78.7	79.1	79.4	79.0	82.6	83.1	83.3	83.3
Life expectancy at birth for males	68.7	69.2	69.4	70.0	70.3	70.7	71.2	71.6	72.2	72.3	72.3	76.6	77.3	77.7	77.9
Healthy life years at birth for females	54.3	57.2	57.8	58.2	58.2	58.6	59.1	60.5	60.1	60.8	60.1	62.0	62.1	61.5	63.3
Healthy life years at birth for males	52.2	54.4	55.1	54.8	55.9	56.3	57.6	59.2	59.1	58.9	58.2	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	35.8	37.0	38.2	36.2	36.0	36.0	36.4	37.8	37.4	39.4	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	13.5	12.8	10.3	8.5	8.6	8.0	8.0	7.8	7.5	8.1	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	45	60	75	89	92	94	95	96	97	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	41	46	52	57	58	60	61	62	62	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.9	1.1	1.3	1.5	1.5	1.6	1.6	1.6	1.6	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	34	33	34	37	38	39	44	40	43	42	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.13.2: Statistical Annex - continued – Hungary

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	9.8	9.8	9.7	9.5	9.3	9.1	8.9	-10%	2%
Dependency									
Number of dependents in millions	0.89	0.91	0.98	1.01	1.03	1.05	1.02	15%	25%
Share of dependents, in %	9.1	9.3	10.1	10.7	11.1	11.6	11.5	28%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.7	0.7	0.8	0.9	1.0	1.1	1.1	63%	73%
AWG risk scenario	0.7	0.8	1.1	1.6	2.3	3.4	4.8	591%	170%
Coverage									
Number of people receiving care in an institution	255,362	262,142	281,893	295,682	302,531	308,220	300,668	18%	72%
Number of people receiving care at home	59,896	62,444	69,636	75,877	79,978	84,892	84,690	41%	86%
Number of people receiving cash benefits	0	0	0	0	0	0	0	:	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.2	3.3	3.6	3.9	4.1	4.3	4.3	35%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	35.5	35.7	36.0	36.6	37.2	37.3	37.6	6%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	71.6	71.3	70.6	69.9	69.2	68.5	68.1	-5%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	28.4	28.7	29.4	30.1	30.8	31.5	31.9	12%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	19.3	18.8	18.9	20.3	21.5	22.6	22.9	19%	10%
Unit costs of home care per recipient, as % of GDP per capita	32.6	31.8	32.0	34.1	36.3	37.8	38.1	17%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	:	:	:	:	:	:	:	:	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.14. IRELAND

General context: Expenditure, fiscal sustainability and demographic trends

GDP per capita in PPS thousand is at €47,800 and far above EU average of €29,600 in 2015. Ireland has a population of 4.7 million inhabitants⁽⁵¹²⁾. It should be noted that in 2015 the GDP of Ireland grew by 25.1% from its 2014 level, which has a strong effect on some of the variables presented as a ratio of GDP in this country profile⁽⁵¹³⁾.

During the coming decades the population will steadily increase to 6 million inhabitants in 2070. Thus, Ireland is facing a considerable increase of its population by 29%, while the EU average population is estimated to increase by 2%.

Health status

Life expectancy at birth for both women and men was, in 2015, respectively 83.4 years and 79.6 years and is slightly above the EU average (83.3 and 77.9 years respectively). However, the healthy life years at birth for both sexes are 67.9 years (women) and 66.6 years (men) significantly above the EU-average (63.3 and 62.6 respectively). At the same time, the percentage of the Irish population having a long-standing illness or health problem is lower than in the Union as a whole (26.8% and 34.2% respectively in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities has decreased since 2005, and is significantly lower than the EU-average (5.4% against 8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 0.25 million residents living with strong limitations due to health problems in 2016, an increase of 88% is envisaged until 2070 to slightly more than 0.46 million. That is a far steeper increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 5.3% to 7.7%, an increase of 46% (EU: 21%).

⁽⁵¹²⁾ This is according to Eurostat projections.

⁽⁵¹³⁾ Real GDP based on 2017 National Income and Expenditure Accounts. Nominal growth in 2015 was 34.4%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.9 pps of GDP by 2070⁽⁵¹⁴⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.4 pps of GDP by 2070. Ireland faces low fiscal sustainability risks in the short run and medium term, but risks are medium in the long term, risks, due to the significant projected increase in ageing costs including health care and long-term care⁽⁵¹⁵⁾.

System Characteristics⁽⁵¹⁶⁾

The National Positive Ageing Strategy (NPAS) was published in 2013. It is the first policy document focused on the care of older people since the publication of "The Years Ahead" in 1998. It represents the over-arching blueprint for age related policy and service delivery across Government and society in the years ahead (Department of Health, 2013).

A Framework for Improved Health and Wellbeing 2013-2025 (Department of Health, 2013) is a reform within Ireland's ongoing health reform programme that is of key importance to the implementation of the NPAS.

The Nursing Homes Support Scheme (NHSS), introduced in 2009, had the aim of ensuring consistency in the funding of nursing home care by the State and individuals. Its aim was to 'make long term nursing home care accessible, affordable and anxiety free' (Department of Health and Children, 2009). It replaced the previous Nursing

⁽⁵¹⁴⁾ The 2018 Ageing Report https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁵¹⁵⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁵¹⁶⁾ This section draws on OECD (2011b) and ASISP (2014).

Home Subvention Scheme which hugely subsidised care for some recipients, but meant a great number of recipients having to pay for the majority of the extremely high care costs.

In line with government policy, home support services are provided to assist older people to live as independently as possible in their own homes and communities. In addition to the mainstream Home Help (HH) service, enhanced home care is provided through Home Care Packages (HCP), introduced in 2005 and, since 2014, Intensive Home Care Packages for people with complex care needs. In 2018, the funding streams for HH and standard HCPs were combined and a single Home Support Service came into operation, streamlining the application process and facilitating service users to move to changed levels of service as their assessed needs change. The target for this year is to provide 17.09 HSS hours to 50,500 people. This compares with 16.34 hours (HH & HCPs) to 50,000 people in 2017. In addition, 235 Intensive HCPs will provide 360,000 hours to people with complex needs.

The provision of short-stay residential beds is a key component of the integrated model of care planned for the delivery of services to older people. Short stay beds are allocated across 'step up/step down' care, intermediate care, rehab and respite care depending on current demands. In 2018, approximately 2,000 short-stay residential care beds will be provided. In addition, to facilitate discharge from acute hospitals, there is a targeted provision of approximately 850 transitional care beds at any one time.

Services are provided on the basis of assessed health-care need and there is no means-testing. Other services include day care which provides about 28,000 places per week in 299 centres, and meals-on-wheels provided by 345 centres.

In contrast to most other EU countries, the public expenditure long-term care takes exclusively the shape of in-kind benefits, with no role for cash benefits, beyond those provided to carers.

Administrative organisation

Long-term care is funded and delivered as part of the health services in Ireland under the auspices of the HSE. The responsible minister is the Minister

of State with responsibility for Mental Health and Older People at the Department of Health. The Minister for State for Older People is also responsible for the coordination of policy beyond the Department of Health.

The Health Service Executive (HSE) of Ireland is responsible for providing and/or supervising a wide range of residential, community and home services designed to support people to live at home.

Types of care

In Ireland, long-term care can be taken to include both home care and residential care. This gives a four-fold classification of long-term care: older people/people (under 65) with disabilities, residential care/domiciliary care.

Several schemes/benefits provide support for people who require long-term care.

The Nursing Homes Support Scheme provides financial support towards the cost of long-term nursing home care. A care needs assessment is carried out by an appropriate healthcare professional to identify whether an applicant to the Scheme requires long-term care

Home care is an increasingly important component of the supports offered to older people. These services are critical to support older people to stay in their own homes and communities, and maintain their independence for as long as possible. They also facilitate the discharge of older people from hospital when the acute phase of their care has been completed.

Home Support Services are provided on the basis of assessed health-care need carried out by health care professionals and there is no means-testing. People are cared for at home under a wide variety of arrangements, both formal and informal. The HSE provides services both directly and through service agreements with private and voluntary sector providers.

Home Support Services provide personal and/or essential domestic care to dependent people to support them to live at home. In particular, they

are aimed at older people living in the community who are in acute hospitals and are at risk of admission to long-term residential care.

Eligibility criteria

Applicants to the Nursing Homes Support Scheme must undergo care needs and financial assessments to determine a) whether long-term nursing home care is the most appropriate option (Care Needs Assessment) and b) what they can afford to contribute towards their cost of care. Anyone who is assessed as requiring long-term nursing home care can avail of the scheme, regardless of age. However, nursing home care must be appropriate to meet the individual's care needs. The legislation underpinning the Nursing Homes Support Scheme requires each private nursing home to negotiate and agree a price for long-term residential care services with the National Treatment Purchase Fund (NTPF), should they wish to be an approved nursing home for the purposes of the Scheme. This is a necessary feature of the scheme due to the commitment by the State to meet the full balance of the cost of care over and above a person's contribution.

To access Carer's Benefit, Carer's Allowance, Constant Attendance Allowance and Carer's Support Grant, the applicant must submit information from the care recipient's doctor as to the degree of care required. This is reviewed by a Department of Social Protection medical assessor and the benefits are provided by the Department of Social Protection.

Co-payments, out of the pocket expenses and private insurance

Under the NHSS scheme people make a contribution of up to 80% of their assessable income and a maximum of 7.5% of the value of any assets towards the cost of care and the State will pay the balance. In the case of a couple, the applicant's means are assessed as 50% of the couple's combined income and assets. The first €36,000 of assets, or €72,000 for a couple, is not counted in the financial assessment. Where assets include land and property in the State, the 7.5% contribution based on such assets may be deferred and collected from the person's estate. This is an optional Nursing Home Loan element of the scheme. An individual's principal residence is only

included in the financial assessment for the first three years of their time in care. This is known as 'the three-year cap'

Government policy is to support older people to live in dignity and independence in their own homes and communities for as long as possible. This is achieved through a range of community based services such as mainstream Home Support Services, Meals-on-Wheels and Respite or Day Care. Intensive HCPs, for those with high dependency levels were introduced in 2014.

Role of the private sector

Public, voluntary and private for profit providers provide long-term care in Ireland. In the past most long-term care was either provided by public or publicly funded care providers (often run by Catholic and Protestant churches) or informally typically by family members (Wren, 2009). The last few years have seen a sharp increase in private providers of home care. There is no official register of private and not-for-profit home care companies, but it is estimated that currently there are in excess of 130 such providers (including franchises). This reflects a decline in informal care and a significant increase in the HSE budget allocation to home care services.

Formal/informal caregiving

Overall Government policy in Ireland is to maintain and support older people at home and in their communities. The Department of Social Protection operates a number of income support schemes for people who stay at home to care for elderly persons or persons with disabilities.

Carer's Allowance: Carer's Allowance is a means-tested payment for carers who look after certain people in need of care and attention on a full-time basis. Those in receipt of another social welfare payment and providing someone with full time care and attention may qualify for a reduced rate of carer's allowance in addition to the original payment.

Care Sharing: From 14 March 2005, two carers who are providing care on a part-time basis in an established pattern can be accommodated on the carer's allowance scheme.

Carer's Benefit: Carer's Benefit is a payment for people who have made social insurance contributions and who have recently left the workforce and are looking after somebody in need of full-time care and attention. Carer's benefit may be claimed for a total of 2 years for each person being cared for. Carers Leave (unpaid) may be applied for by those seeking to obtain leave to care from their place of work.

Carer's Support Grant: The Carer's Support Grant is an annual payment for full-time carers who look after certain people in need of full-time care and attention. The payment is made regardless of the carer's means but is subject to certain conditions.

The HSE provides respite care to give carers a break from caring. Respite is provided based on need and within available resources.

Prevention and rehabilitation policies/measures

The National Positive Ageing Strategy was published in April 2013. This Strategy provides the blueprint for a whole of Government and whole of society approach to planning for an ageing society. The Strategy provides a vision for an age-friendly society and includes four National Goals and underpinning objectives to provide direction on the issues that need to be addressed to promote positive ageing.

The Department of Health has framed a new approach to improve engagement between stakeholders and relevant Departments and Agencies. The inaugural Positive Ageing Stakeholder Forum was held in March 2017, and was attended by civic society organisations who are representative of the needs and views of older people in Ireland. On foot of the success of and interest in the Stakeholder Forum, a second Forum is due to be held in late 2018.

The Cabinet Committee on Social Policy oversees the implementation of the Strategy. As part of the NPAS implementation process, a Healthy and Positive Ageing Initiative has been established to provide evidence of the factors contributing to healthy ageing, including at local level and ultimately inform policy responses to population ageing in Ireland. The first national Positive Ageing Indicators report was published in 2016

and highlights many of the positive and negative aspects of growing old in Ireland. A second national Positive Ageing Indicators report is due for publication in late 2018.

The National Carers Strategy was published in July 2012 and sets the strategic direction for policies, services and supports provided by Government Departments and agencies for carers. It sets out a vision to work towards an ambitious set of National Goals and Objectives to guide policy development and service delivery, to ensure that carers feel valued and supported to manage their caring responsibilities with confidence and are empowered to have a life of their own outside of caring.

Recently legislated and/or planned policy reforms

Recently legislated and planned reforms

The Nursing Homes Support Scheme (NHSS), often referred to as the "Fair Deal" is a scheme of financial support for people who require long-term nursing home care. The statutory based scheme commenced on the 27th October 2009 with the enactment of the Nursing Homes Support Scheme Act 2009 and replaced the scheme of Nursing Home Subvention, which had been in existence since 1993. The NHSS is operated by the HSE. When the Scheme commenced in 2009, a commitment was made that it would be reviewed after three years. The Report of the Review was published in July 2015.

The Government is committed to promoting care in the community so that people can continue to live in their own homes for as long as possible. To support this, the Department of Health is currently engaged in the development of a new, stand-alone statutory scheme and a system of regulation for home-care services.

The new home-care scheme will introduce clear rules in relation to the services for which individuals are eligible and in relation to service-allocation. It will therefore be an important step in ensuring that the system operates in a consistent and fair manner and will help to improve access to home-care services on an affordable and sustainable basis. The introduction of a system of

regulation for home-care will help to ensure public confidence in the services provided.

Policy reforms under preparation/adoption

It is estimated that there are currently 55,000 people with dementia in Ireland. This number is expected to treble to approximately 157,000 by 2046. Given the increasing numbers of people with dementia, the Government published Ireland's first National Dementia Strategy in December 2014.

The Irish National Dementia Strategy aims to improve dementia care to allow people with dementia to live well for as long as possible and have services and supports delivered as well as possible. A National Dementia Office was established in the HSE in 2015 to drive the Strategy's implementation. A mid-term review of the Strategy (May 2018) noted that good progress has been made on implementing many of the Strategy's 35 priority and additional actions but that additional financial and staffing resources will be required in the areas of diagnosis, post-diagnostic supports, primary care, acute care, home care and housing if the Strategy is to be fully implemented.

Possible future policy changes

The Review of the Nursing Homes Support Scheme included a general examination of the Scheme, as well as the balance between residential care and care in the community, and a number of key issues have been identified for more detailed consideration across Departments and Agencies. To this end, an Interdepartmental/Agency Working Group has been established to oversee the implementation of certain recommendations contained in the Review. On foot of recommendations within the Review, it has been undertaken to amend the scheme, affording farms and small businesses similar consideration, in certain circumstances, as principle private residences with regards the 'three-year cap'. This is in progress. As the Scheme is statutory based, the implementation of recommendations arising from the Review may require amendments to the Nursing Homes Support Scheme Act 2009.

Challenges

Ireland has taken significant steps to provide its population with good quality care and to provide care in the community. The main challenges of the system appear to be:

- **Improving the governance framework:** To set the public and private financing mix and organise formal workforce supply; To face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; To use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation.
- **Improving financing arrangements:** To consider better pooling across generations, e.g. by levying LTC premia on those aged 40 years and over or by requiring also retirees to contribute premia to social LTC insurance, based on their pension; To explore the potential of private LTC insurance as a supplementary financing tool; To determine the extent of user cost-sharing on LTC benefits.
- **Encouraging home care:** To develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; To monitor and evaluate alternative services, including incentives for use of alternative settings.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care; To seek options to increase the productivity of LTC workers.
- **Supporting family carers:** To establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not

encouraged to withdraw from the labour market for caring reasons.

- **To facilitate appropriate utilisation across health and long-term care:** To arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; To steer LTC users towards appropriate settings.
- **Improving value for money:** To encourage competition across LTC providers to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and coordination between health and care services; To invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; To employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.14.1: Statistical Annex - Ireland

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	170	185	197	188	170	168	172	176	180	195	262	12,451	13,213	13,559	14,447
GDP per capita, PPS	32.7	33.8	35.1	32.1	30.6	33.1	34.2	34.5	34.5	37.1	47.8	26.8	28.1	28.0	29.6
Population, in millions	4.1	4.2	4.3	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	:	:	:	:	1.8	1.7	1.4	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	574.9	582.9	624.0	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	:	:	:	:	4.5	4.6	4.7	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	81.3	81.7	82.1	82.4	82.7	83.1	83.0	83.1	83.1	83.5	83.4	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	76.9	77.3	77.9	77.8	78.5	78.6	78.7	79.0	79.3	79.6	76.6	77.3	77.7	77.9
Healthy life years at birth for females	64.0	64.9	65.6	65.1	65.2	66.9	68.3	68.5	68.0	67.5	67.9	62.0	62.1	61.5	63.3
Healthy life years at birth for males	62.9	63.2	62.9	63.5	63.9	65.9	66.1	65.9	65.8	66.3	66.6	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	25.4	24.9	24.5	26.2	28.3	26.5	26.7	27.7	27.1	26.8	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.1	5.9	5.5	5.4	5.2	4.9	4.9	5.6	5.8	5.4	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	22	22	22	22	23	23	27	28	28	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	51	52	53	54	55	56	65	66	67	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.7	1.7	1.7	1.7	1.7	1.7	2.0	2.0	2.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	161	:	:	:	:	187	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	21	26	25	24	25	24	24	24	25	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.14.2: Statistical Annex - continued - Ireland

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	4.7	4.9	5.2	5.4	5.7	5.9	6.0	29%	2%
Dependency									
Number of dependents in millions	0.25	0.26	0.31	0.36	0.40	0.44	0.46	88%	25%
Share of dependents, in %	5.3	5.4	6.1	6.7	7.1	7.5	7.7	46%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.3	1.4	1.7	2.1	2.7	3.1	3.3	145%	73%
AWG risk scenario	1.3	1.4	1.9	2.6	3.4	4.3	4.8	255%	170%
Coverage									
Number of people receiving care in an institution	35,036	38,024	49,307	63,982	80,168	97,649	109,458	212%	72%
Number of people receiving care at home	69,231	75,509	97,136	121,738	147,391	172,235	184,783	167%	86%
Number of people receiving cash benefits	0	0	0	0	0	0	0	:	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	2.2	2.3	2.8	3.4	4.0	4.6	4.9	119%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	42.3	43.0	46.5	51.4	56.3	61.1	63.6	50%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	59.3	59.3	59.6	60.3	61.0	61.8	62.7	6%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	40.7	40.7	40.4	39.7	39.0	38.2	37.3	-8%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	106.2	103.3	105.9	108.2	115.1	116.6	113.5	7%	10%
Unit costs of home care per recipient, as % of GDP per capita	36.9	35.7	36.5	37.5	40.1	40.8	40.0	8%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	:	:	:	:	:	:	:	:	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.15. ITALY

General context: Expenditure, fiscal sustainability and demographic trends

With almost 61 million inhabitants, Italy has more than 12% of the total EU population in 2016 ⁽⁵¹⁷⁾. This makes it the fourth largest country in terms of population, after Germany, France and the United Kingdom. During the coming decennia the population of Italy will steadily decrease, from 60.8 million inhabitants in 2016 to 54.9 million inhabitants in 2070. This 9.6% decrease represents a gap of about 11 pps from the EU average population, which is overall projected to increase by 2%.

With a GDP of some €1,650 bn (11% of the EU's total GDP), or 26,100 PPS per capita, the value for 2015 is lower than the EU average of 29,610. Based on the Ageing Report 2018 ⁽⁵¹⁸⁾, total public expenditure on long-term care (health and social part) ⁽⁵¹⁹⁾ is, with 1.7% of GDP in 2015, slightly above the EU average in the same year (1.6%). However, the health component, with 0.7% in 2015, is lower than the EU average of 1.2% in the same year.

Health status

Life expectancy at birth for both women and men is in 2015 respectively 84.9 years and 80.3 years and is above the EU average (83.3 and 77.9 years respectively). The healthy life years at birth for both sexes are with 62.7 years (women) and 62.6 years (men) similar to the EU-average (63.3 and 62.6 respectively). The percentage of the population having a long-standing illness has, though with fluctuations, increased through the decade going from 21.6% (2006) to 24.8%, in 2015, but it is well below the EU-average (34.2% in 2015). On the other hand, the percentage of the population indicating a self-perceived severe limitation in its daily activities, which has also been increasing from 7.1% (2006) to 9.4% (2015), is above the EU-average (8.1% in 2015).

⁽⁵¹⁷⁾ Based on Eurostat projections.

⁽⁵¹⁸⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁵¹⁹⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase significantly over the coming 50 years. From 5.48 million residents living with strong limitations due to health problems in 2016, an increase of 19% is envisaged until 2070 to around 6.53 million. That is less steep an increase than for the EU as a whole (25%). Also as a share of the population the dependents are becoming a bigger group, going from 9.0% in 2016 to 11.9% in 2070, an increase of 32%, above the EU average of 21% over the same period ⁽⁵²⁰⁾.

Expenditure projections and fiscal sustainability

With the demographic changes, the public expenditure on long-term care as a percentage of GDP is projected to steadily increase. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.3 pps of GDP, from 1.7% in 2016 to 3.0% by 2070 ⁽⁵²¹⁾. The "AWG risk scenario", which also captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.2 pps of GDP by 2070, bringing long-term care spending in Italy from 1.7% to 3.9% over the same period. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure. Medium and long-term sustainability risks, which are classified as high for Italy, mainly derive from the high debt-to-GDP ratio and do not stem from long-term care expenditure and the projected cost of ageing ⁽⁵²²⁾.

System Characteristics

Public expenditure on long-term care (LTC) includes three components: i) long-term care services to dependent people provided by the public health care system, ii) the social component

⁽⁵²⁰⁾ The 2018 Ageing Report.

⁽⁵²¹⁾ The 2018 Ageing Report.

⁽⁵²²⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

of long-term care provisions provided by municipalities and iii) attendance allowances (*indennità di accompagnamento*)⁽⁵²³⁾.

The overall expenditure accounts for 1.7 percentage points of GDP in 2016 and refers to all long-term care provisions financed by public resources, regardless of the age of recipients. Since the incidence of dependency is strongly linked to age, about three quarter of the expenditure is directed at the elderly over 65.

The health component of long-term care is provided by Regions through the local health authorities (*Aziende Sanitarie Locali*, ASLs) and accounts for about 40% of the total public expenditure on long-term care.

The social component of long-term care services includes a heterogeneous group of benefits, largely in kind, mainly provided at a local level by municipalities, directly or in association. These provisions are generally means-tested.

Both health and social long-term care provisions include home and residential care services. The admission to long-term care services is based on needs but also on income levels: co-payments may play a relevant role and together with the waiting lists tend to shape the users' profile.

Investment in home care is average compared to other countries, although this type of service is fundamentally and informally supported by migrant care workers that are paid directly by families, also through the use of the attendance allowance. This partly explains the fact that investment in residential care is, on the contrary, relatively weak. Nevertheless, the relatively low coverage of residential care may create tensions on public home care provision insofar as severe cases, that could be treated through different forms of residential care (last stages of Alzheimer or other forms of dementia, etc.), might be left at home.

Attendance allowances are based on a cash allowance programme for individuals with very severe disability. They are not means-tested and

they are run by the *National Institute of Social Security – INPS* and financed through general taxation. The attendance allowance accounts for about 500 euros⁽⁵²⁴⁾ per month (for 12 months) and it is provided directly to the dependent person. Different amounts are foreseen for particular categories of disability such as the blind or the deaf-mute. Italy spent in 2017 the equivalent of 0.89% of its GDP in long-term care cash benefits, of which 0.79% of GDP for attendance allowances alone. The share of this type of care was in 2017 about 52% of total long-term care expenditure (46% for attendance allowances alone), nearly four fifty of which covers the frail elderly over 65⁽⁵²⁵⁾.

Administrative organisation

The actors directly involved in the organisation of long-term care services are municipalities, local health authorities - ASLs), nursing homes (*residenze sanitarie assistenziali*- RSAs) and the National Institute of Social Security (*INPS*), but other players are involved in planning and funding these services – i.e. the central state, regions and provinces. Additionally, in Italy individual households play an important role in the organisation and provision of long-term care.

Types of care

In Italy, public long-term care for older persons includes three main kinds of formal assistance: community care, residential care and cash benefits. The Italian National Health Service (*Servizio Sanitario Nazionale*, SSN) plans and manages, through local health units (*aziende Sanitarie locali*), home health-care services – the so-called 'integrated domiciliary care' provided by the *Assistenza Domiciliare Integrata (ADI)* – and other health services provided in residential settings. Personal social services, both domestic and personal care tasks, provided at home by the *Servizi di Assistenza Domiciliare (SAD)*, and institutional social care are managed at a local level by municipalities, although this should be planned in coordination with the ADI. In practice, there may be significant differences between different municipalities in terms of spending on

⁽⁵²³⁾ Ministero dell'economia e delle finanze - RGS (2018), Le tendenze di medio-lungo periodo del sistema pensionistico e socio-sanitario, Report no. 19.

http://www.rgs.mef.gov.it/VERSIONE-I/attivita_istituzionali/monitoraggio/spesa_pensionistica/.

⁽⁵²⁴⁾ Specifically, 516.35 euros in 2018.

⁽⁵²⁵⁾ Ministero dell'economia e delle finanze - RGS (2018), Le tendenze di medio-lungo periodo del sistema pensionistico e socio-sanitario, Report no. 19.

care provided. Levels of institutionalisation of patients differs also between regions. Long-term care is delivered by both public and accredited private providers of health and personal social care. In terms of shares of long-term care spending, Italy stands well above average (52.2% vs. 15.6% for the EU in 2016) as for the share to fund cash benefits. This is paired with comparatively generous allowances with respect to the EU average, with unit costs of cash benefits per recipients as a share of GDP per capita standing at 28.9 vs. 11.8 in 2016. This measure gives an indication of the proportion between the spending on cash allowances and the available resources.

Eligibility criteria

In Italy there is not one single, national legal definition of persons in need of care to which one can refer.

To obtain services in-kind for long-term care, there is not the same unique system. Indeed, ASLs of the Italian National Health Service are responsible for assessing the degree of disability of citizens living in their catchment area, but their criteria are not homogeneous. For most health and social services, the needs assessments are carried out by a multidisciplinary team of the ASL – in most of them by the geriatric evaluation units (*Unità di Valutazione Geriatrica*), which include doctors, nurses, social workers and sometimes administrative employees. This team in some cases classifies the claimants into categories of need, sets out the care plan and chooses the type of provider.

However, to obtain the cash benefits provided by the *INPS*, each region refers to the same classification system: a claimant must apply to the Local Health Authority Service (ASL) in charge of deciding whether the health requirements (in terms of disability and dependence) are present, through its medical commission. If this is the case, the claimant is referred to an *INPS* commission, which makes the final decision.

Co-payments, out of the pocket expenses and private insurance

Neither the access nor the amount of social transfers related to the cash benefits programme (the “Attendance Allowances”) are means-tested. This points to scope to increase efficiency,

especially considering the current structure of long-term care provision with generous cash benefits. The Attendance Allowance is provided only on the base of needs. The criteria of access to residential and home care are somewhat differentiated in the country as well as the criteria of co-payment. Practically in the whole country means-testing is applied to define the amount of economic resources households have to provide in order to receive the service.

Role of the private sector

Private providers of long-term care (both for-profit and not-for-profit) have a share of 65% of all institutional long-term care beds.

Private home care is increasingly important in the Italian long-term care system, although there are no official data on this aspect. According to the little data available, 6.6% of those aged over 65 (NNA, 2009) received home care privately. Private home care is provided mainly by migrant workers on individual basis: in 2008 it was estimated that around 700,000 migrant workers were employed to provide home care to elderly persons (NNA, 2009).

Formal/informal caregiving

Informal care is extremely important in the Italian social protection system, but the data available are limited.

Generally speaking, in northern Italy the culture of public (formal) service in long-term care is rather widespread, partly owing to the high level of participation by women in the labour market. These regions – and municipalities – have been making an effort to improve their long-term care system, thanks also to their more developed management capabilities and their larger economic resources. In the south, by contrast, the care burden rests mostly on families (informal caregiving), with poor public (formal) support.

Prevention and rehabilitation policies/measures

Rehabilitative health care services, included in the long-term care definition, are provided to disabled people at home or in residences, generally as a part

of more general assistance programmes related to dependency.

Recently legislated and/or planned policy reforms

The health component for long-term care provisions depends, amongst the others, on the level of resources for the financing of the public health care system. In this regard, the following interventions should be mentioned:

- Law 208/2015 (art. 1, paragraph 508) has redefined the level of the financing resources in 111.002 million euro for 2016 and set it to 113.063 million euro for 2017, 114.998 million for 2018 and 117.988 euro million for 2019;
- The Stability law for 2017, Law 232/2016 (art. 1, paragraph 392) has downsized the level of the financing resources to 113.000 million euro for 2017, 114.000 million euro for 2018 and 115.000 million euro for 2019;
- Decree foreseen by Law 232/2016, art. 1, paragraph 394 has further reduced the level of the financing resources to 112.577 million euro for 2017, 113.396 million euro for 2018 and 114.396 million euro for 2019.

Furthermore, the budget law for 2017 has increased the Fund for dependents in the State budget (*Fondo per la non autosufficienza*) up to 450 million euro per year and made it permanent as of 2017. Resources in the Fund are transferred to Regions to finance services and benefits, generally in kind, for people with severe disabilities.

Lastly, the Law 112/2016 allocated financial resources of above 50 million euro per year to a new Fund targeted to support severely disabled people surviving their parents.

Challenges

Italy has a system of long-term care that focuses on cash benefits as much as on residential and home care. Based on the current features, the main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities concerning the provision of long-term care services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to determine the extent of user cost-sharing on long term care benefits; to extend means-testing to cash benefit provisions, to include assets in the means-test used to determine individual cost-sharing (or entitlement to public support) for B&L costs better reflects the distribution of economic welfare among individuals.
- **Providing adequate levels of care to those in need of care:** to adapt and improve long term care coverage schemes, setting a homogenous need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on long term care benefits; to provide targeted benefits to those with highest LTC needs.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance

structures for care co-ordination and the integration of health and care to facilitate care co-ordination.

- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for long term care; to create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; to steer long term care users towards appropriate settings.
- **Improving value for money:** to invest in ICT as an important source of information, care management and coordination; to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.
- **Improving administrative efficiency.**

Table 3.15.1: Statistical Annex – Italy

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	1,490	1,548	1,610	1,632	1,573	1,605	1,637	1,613	1,605	1,622	1,652	12,451	13,213	13,559	14,447
GDP per capita, PPS	27.8	28.6	29.2	28.4	26.1	26.5	26.7	26.3	25.3	25.3	26.1	26.8	28.1	28.0	29.6
Population, in millions	57.9	58.1	58.2	58.7	59.0	59.2	59.4	59.4	59.7	60.8	60.8	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	:	:	:	0.7	0.7	0.7	0.7	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	186.9	184.8	185.8	188.6	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	:	:	:	1.4	1.4	1.4	1.4	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	83.6	84.1	84.2	84.2	84.3	84.7	84.8	84.8	85.2	85.6	84.9	82.6	83.1	83.3	83.3
Life expectancy at birth for males	78.1	78.6	78.8	78.9	79.1	79.5	79.7	79.8	80.3	80.7	80.3	76.6	77.3	77.7	77.9
Healthy life years at birth for females	67.8	64.7	62.6	61.8	62.6	:	62.7	61.5	60.9	62.3	62.7	62.0	62.1	61.5	63.3
Healthy life years at birth for males	66.6	65.2	63.4	62.9	63.4	:	63.5	62.1	61.8	62.5	62.6	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	21.6	21.2	22.6	22.1	22.6	26.7	24.9	25.3	24.8	24.8	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	7.1	7.6	8.2	8.0	:	8.7	9.5	9.5	9.0	9.4	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	165	201	237	273	276	280	294	299	302	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	359	498	637	775	782	791	754	767	777	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.9	1.2	1.5	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.15.2: Statistical Annex - continued – Italy

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	60.8	60.7	60.3	60.0	58.9	56.8	54.9	-10%	2%
Dependency									
Number of dependents in millions	5.48	5.68	6.16	6.68	7.12	7.02	6.53	19%	25%
Share of dependents, in %	9.0	9.4	10.2	11.1	12.1	12.4	11.9	32%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.7	1.8	2.0	2.3	2.8	3.1	3.0	71%	73%
AWG risk scenario	1.7	1.8	2.1	2.6	3.3	3.8	3.9	128%	170%
Coverage									
Number of people receiving care in an institution	684,968	709,591	762,424	841,051	947,077	983,824	910,855	33%	72%
Number of people receiving care at home	673,543	721,887	829,866	968,574	1,144,280	1,208,538	1,113,783	65%	86%
Number of people receiving cash benefits	1,886,527	1,990,604	2,212,474	2,509,581	2,889,635	3,014,888	2,781,765	47%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	5.3	5.6	6.3	7.2	8.5	9.2	8.8	64%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	59.2	60.2	61.8	64.7	70.0	74.2	73.6	24%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	47.8	47.0	45.9	46.8	47.2	46.8	46.6	-3%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	52.2	53.0	54.1	53.2	52.8	53.2	53.4	2%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	73.2	73.4	74.0	74.4	74.9	75.5	75.6	3%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	26.8	26.6	26.0	25.6	25.1	24.5	24.4	-9%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	53.5	53.3	53.9	58.1	61.2	62.3	62.6	17%	10%
Unit costs of home care per recipient, as % of GDP per capita	19.9	19.0	17.4	17.3	16.9	16.4	16.5	-17%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	28.9	29.1	29.6	29.8	29.9	30.6	31.1	7%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.16. LATVIA

General context: Expenditure, fiscal sustainability and demographic trends

With a GDP of around €24 bn or 16,200 PPS per capita in 2015, Latvia is below the EU average GDP per capita of €29,600.

During the coming decennia the population of Latvia will gradually decline, from 2.0 million inhabitants in 2016 to 1.3 million inhabitants in 2070. This 32% fall contrasts sharply with the EU average increase of 2%.

Health status

Life expectancy at birth for men and women was, in 2015, respectively 69.7 years and 79.5 years, below the EU average (77.9 and 83.3 years respectively). In 2015 the healthy life years at birth were 54.1 years (women) and 51.8 years (men) below the EU-average (63.3 and 62.6 respectively). At the same time, the percentage of the Latvian population having a long-standing illness or health problem is higher than in the Union as a whole (41.2% and 34.2% respectively in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities was in 2015 10.1%, above the EU-average (8.1%).

Dependency trends

The share of dependents in Latvia is set to increase over this period from 8.5% in 2016 to 11.1% of the total population in 2070, an increase of 31%. This is slightly below the EU-average increase of 21%. From 0.17 million residents living with strong limitations due to health problems in 2016, a decrease of 11% is envisaged until 2070 to 0.15 million. This is in contrast to the increase in the EU as a whole (25%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is set to gradually increase. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.2 pps

of GDP by 2070 ⁽⁵²⁶⁾. However, the "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.6 pps of GDP by 2070. Latvia faces only low fiscal sustainability risks in the short, medium and long-term. Nonetheless, addressing the underfinancing of the healthcare services might lead to higher public spending in the medium to long term ⁽⁵²⁷⁾.

System Characteristics ⁽⁵²⁸⁾

Administrative organisation

LTC is organised in a relatively fragmented way: services provided for different target groups are organised in different ways and financed from different sources of public financing. Latvian legislation stipulates that in a situation when there is a need for care, municipalities need to organise the provision of services, either by the municipality itself, NGOs or private providers.

All types of long-term care for the elderly (institutional and residential – such as home care, day centres, etc.) are the responsibility of municipalities while long-term institutional social care for persons with mental disorders (children as well as adults) and long-term care (including both social and health) of chronic psychiatric patients are the responsibility of the Ministry of Welfare and the Ministry of Health.

Institutional care for children deprived of parental care up to age of 2 years is responsibility of the Ministry of Welfare and institutional care for children from age of 2 years up to age of 18 years is responsibility of municipalities. Institutional care is provided in cases when care in a family-like environment — foster family or with a guardian cannot be provided for respective child.

Public spending on long-term care⁽⁵²⁹⁾ reached 0.4% of GDP in 2016 in Latvia, below the average

⁽⁵²⁶⁾ The 2018 Ageing Report https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁵²⁷⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁵²⁸⁾ This section draws on OECD (2011b) and ASISP (2014).

EU level of 1.6% of GDP. 84.7% of the benefits were in-kind, while 15.3% were cash-benefits (EU: 84.4 vs 15.6%).

In the EU, in 2016, the base year of the Ageing Report projections 50% of dependents are receiving formal in-kind long-term care services or cash-benefits for long-term care. This share is with 26% lower in Latvia. Overall, 2.2% of the population (aged 15+) receives formal long-term care in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of long-term care services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional services makes up 82.3% of public in-kind expenditure (EU: 66.3%), 17.7% being spent for long-term care services provided at home (EU: 33.7%). Thus, relative to other Member States Latvia seems might have some potential to focus more on home care, which may be cost-efficient. As institutional care is relatively costly, Member States with shares well above the EU levels may benefit from efficiency gains by shifting some coverage (and thus expenditure) from institutional to other types of care.

Types of care

In 2016 there were 85 municipal nursing homes for elderly (known as “social care centres” in the Latvian long-term care systems) providing care for 6344 recipients. As explained above, nursing homes for elderly are run by local municipalities. There are as well several institutional care homes for the elderly run by the private sector and NGOs. These are often contracted by municipalities to provide services for their recipients, subject to means-testing of clients and under a price negotiated with the provider. Additionally, in 2016 there were 28 state owned long-term care institutions and 12 long-term care institutions contracted by state provided care for 5194 adults

⁽⁵²⁹⁾ Long-term care benefits in the system of Health Accounts classification can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

and children with mental disorder and 66 children deprived of parental care up to age of 2 years..

Home care is provided formally by a range of providers, including the social services of municipalities, NGOs, charities, private sector agencies and individuals. The provision of home care encompasses as well other forms of support for the elderly, such as help with daily activities (laundry, delivery of warm meals), assistant service and security buttons that can be activated by the recipient if urgent help is needed. The number of recipients receiving home care has been increasing over the last few years, with a slight fall during the economic crisis, but from 2010 it has grown again. At the end of 2016 there were 14,022 elderly and disabled recipients of home care financed by the municipalities. The majority of the services were provided by carers from the municipal social services.

Alternative forms of long-term care include day care centres for pensioners and persons with psychosocial disabilities, social residential facilities as well as group houses. These services are however relatively underdeveloped.

Recipients of home care and institutional care for elderly persons normally cover the expenses of care. For recipients who live in a household with an average income below the defined "needy" threshold (128 euro per month per person) and who have no spouse or child who is legally obliged to support them financially, municipalities will fully cover expenses of care. Municipalities can however set a higher level income threshold for access free of charge services.

In parallel to formal home care, a great proportion of home care services are provided informally without payment by family members, relatives or neighbours. Municipalities are obliged to provide home care services in situations when the elderly or disabled person itself or persons' family members are not able to take care of elderly or disabled person mentioned. Finally, the municipalities can decide to provide additional long-term care cash benefits to recipients or to those relatives with caring responsibilities, although they have no legal obligation to do so. Due to this, the amount of support can vary greatly between different municipalities. Care benefit is granted by local governments mostly in cases

where they cannot provide the service themselves or in cases where there are several service providers available in the municipality and the client can choose between them

Additionally, there is a universal state benefit for disabled people introduced in 2008.

Eligibility criteria

In principle there is no means-testing threshold for access to home care. According to the Law on Social Services and Social Assistance (LSSSA), social services shall be provided only on the basis of an evaluation of the individual needs and resources of a person carried out by a social work specialist.

There is a specific dependency threshold set for each different form of long-term care service.

For home care, dependents are eligible if they are unable to take care of themselves and perform everyday activities.

Recipients of state provided long-term care have to pay for long-term care up to 90% of their pension. The rest of the expenses are covered by the state budget. The amount of money paid by social care recipients for state institutional long-term care was 6,827,506 euro in 2016.

In case of long-term care services financed from the State budget, there is no duty of payment for in case of persons (both children and adults) with severe mental disability and in case of small children (between ages 0 and 2) deprived of parental care.

Municipalities have to provide services to everybody who needs them. If the recipient has no income or spouse or child who is legally obliged to support them financially, then the municipality will partially or fully share the costs of care. The state defines the amount of remaining income after the services received are paid for (the amount of monthly minimum wage for the first family member and half the minimum wage for each next family member). Municipalities can introduce provisions above that if they show wish. The threshold is set at a relatively low level, therefore access to long-term care for people with the income above this threshold can be limited either

by low affordability (especially, if the service is provided by private service providers) or non-availability of home care services in the community.

In 2016 the amount of money paid by recipients and /or their financial supporters for municipal institutional long-term care for elderly persons was 17685,592 euro.

Role of the private sector

As long-term care recipients in Latvia mostly cannot afford to pay the full cost of care in nursing homes, there are some municipalities that commission services from private nursing homes. However, this area is still relatively underdeveloped.

Private home care services are available mostly in the cities; even then, costs of the services are too high to afford for the most of the families, depending on the municipality services can be co-financed. Depending on the municipality those can be available outside the cities as well, including in more remote areas, organised by service providers⁽⁵³⁰⁾.

Formal/informal caregiving

As explained above, municipalities are also free to grant their own long-term care cash benefits. If the municipality does not have its own home care services, it will often grant the benefits in cash to the recipients or their relatives. As a consequence, depending on the municipality financial situation support is granted to care-takers or/and care-givers.

In 2016 only 19 municipalities out of 119 reported spending for financial support to carers; the amount of resources for this purpose has been growing in recent years: It was 539,000 euro in 2010, 786,000 euro in 2012, 848,543 euro in 2014 and 1404,181 euro in 2016. About 50% of municipalities have reported expenditures for financial support to care receivers or carers over the years. Depending on the municipality, support can be granted as a simple cash benefit to the

⁽⁵³⁰⁾ For example –
<http://www.samariesi.lv/lv/pakalpojumi/aprupe-majas-novados>
<http://www.aprupemajas.lv/pakalpojumi.html>

family member providing the informal care or can be formulated as a formal payment for care services on the basis of a contract, therefore formalising what was informal care. Most often these types of contracts are made between a neighbour or a relative and the municipality.

Prevention and rehabilitation policies/measures

Government funded social rehabilitation programme (14 or 21 days long) for persons with different functional disorders is available. For persons above the age 62 (old age pensioners) this service is available only if persons are still in employment.

Recently legislated and/or planned policy reforms

Ministry of Welfare is planning to support more community-based services (primarily for children and persons with mental disabilities), and thus to promote deinstitutionalisation by creating more affordable and more diverse services for the target groups.

Long-term care legislation provides some changes in the calculation of person's payments for long-term institutional care. Since year 2017 in addition to State pensions (including a supplement to the pension) in receiver's income, from which to pay for long-term care service, the following are also included: (i) a service pension, (ii) a special State pension, (iii) a compensation for the loss of capacity to work, (iv) a compensation for harm, (v) a survivor's compensation due to an accident at work or occupational disease, (vi) income from a life-long pension insurance contract regarding the receipt of the accrued funded pension capital as well as (vii) pensions granted in accordance with foreign laws and regulations. From year 2020 onwards, it is planned to decrease, the part of income paid for the institutional long-term care from 90 to 85%.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** To establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities wrt. the provision of long-term care services. To strategically integrate medical and social services via such a legal framework. To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing taking into account the fiscal constraints. To establish good information platforms for LTC users and providers. To set guidelines to steer decision-making at local level or by practising providers. To use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation. To share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes. To deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** To explore the potential of private LTC insurance as a supplementary financing tool. To consider adjusting the extent of user cost-sharing on LTC benefits.
- **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, to assess the need-level triggering entitlement to coverage; the breadth of coverage, i.e. the extent of user cost-sharing on LTC benefits; and the depth of coverage, i.e. the types of services included into the coverage; To explore the potential of providing targeted benefits to those potential recipients of LTC care with highest LTC needs. To reduce the risk of impoverishment of recipients and informal carers.
- **Encouraging home care:** To develop alternatives to institutional care by e.g.

encouraging home care and assessing admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care taking into account fiscal constraints; to monitor and evaluate alternative services, including incentives for use of alternative settings.

- **Encouraging independent living:** To encourage additional provision of effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** Assessing the possibility to introduce policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** To establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system. To steer LTC users towards appropriate settings.
- **Changing payment incentives for providers:** To consider a focused use of budgets negotiated ex-ante or based on a pre-fixed share of high-need users.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services. To invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care. To employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.16.1: Statistical Annex – Latvia

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	14	17	23	24	19	18	20	22	23	24	24	12,451	13,213	13,559	14,447
GDP per capita, PPS	15.9	15.7	15.0	13.8	12.7	13.4	14.0	14.6	14.9	15.4	16.2	26.8	28.1	28.0	29.6
Population, in millions	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	42.8	46.1	50.1	264.1	283.2	352.1	373.6
As % of total government expenditure	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.7	0.7	0.7	0.7	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	76.3	76.1	76.2	77.5	77.7	78.0	78.8	78.9	78.9	79.4	79.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	64.9	65.0	65.3	66.5	67.5	67.9	68.6	68.9	69.3	69.1	69.7	76.6	77.3	77.7	77.9
Healthy life years at birth for females	53.2	52.5	54.8	54.3	56.0	56.4	56.6	59.0	54.2	55.3	54.1	62.0	62.1	61.5	63.3
Healthy life years at birth for males	50.8	50.8	51.4	51.6	52.6	53.1	53.6	54.6	51.7	51.5	51.8	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	36.1	33.6	34.4	34.3	35.6	36.4	36.0	39.7	40.6	41.2	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	10.3	9.1	8.2	6.9	7.5	6.7	7.1	10.1	9.6	10.1	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	6	8	9	11	11	11	11	11	11	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	6	8	9	10	11	11	9	9	9	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.6	0.7	0.8	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.16.2: Statistical Annex - continued – Latvia

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	2.0	1.9	1.7	1.6	1.5	1.4	1.3	-32%	2%
Dependency									
Number of dependents in millions	0.17	0.17	0.17	0.17	0.17	0.16	0.15	-11%	25%
Share of dependents, in %	8.5	8.8	9.6	10.6	11.1	11.2	11.1	31%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.4	0.4	0.5	0.5	0.6	0.6	0.6	34%	73%
AWG risk scenario	0.4	0.5	0.6	0.9	1.4	2.1	3.0	591%	170%
Coverage									
Number of people receiving care in an institution	13,003	13,160	13,108	12,951	12,862	12,427	11,766	-10%	72%
Number of people receiving care at home	14,573	14,743	14,792	15,008	15,070	14,434	13,831	-5%	86%
Number of people receiving cash benefits	15,935	16,150	16,566	16,909	17,551	17,411	16,841	6%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	2.2	2.3	2.6	2.8	3.0	3.1	3.2	43%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	26.0	26.3	26.6	26.6	27.2	27.8	28.5	9%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	84.7	83.9	83.3	82.5	82.0	81.8	80.7	-5%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	15.3	16.1	16.7	17.5	18.0	18.2	19.3	26%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	82.3	81.1	78.3	74.9	71.6	69.5	67.7	-18%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	17.7	18.9	21.7	25.1	28.4	30.5	32.3	83%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	45.6	43.1	42.5	40.5	39.4	38.7	36.1	-21%	10%
Unit costs of home care per recipient, as % of GDP per capita	8.8	9.0	10.4	11.7	13.3	14.7	14.7	68%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	8.2	8.3	8.6	8.8	8.8	8.9	8.9	9%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.17. LITHUANIA

General context: Expenditure projections, fiscal sustainability and demographic trends

GDP per capita in PPS, at 19,600 PPS per capita is below the EU average GDP per capita of €29,600 in 2015. Lithuania has a population of around 2.9 million inhabitants. Over the coming decades, the population of Lithuania will gradually decline, from 2.9 million inhabitants in 2016 to 1.7 million inhabitants in 2070. This 40% fall is very different from the EU average increase of 2%.

Health status

Life expectancy at birth for both men and women was, in 2015, respectively 69.2 and 79.7 years, which is below the EU average (77.9 and 83.3 years respectively). In 2015 the healthy life years at birth for both sexes were 58.8 years (women) and 54.1 years (men) below (particularly for men) the EU-average (63.3 and 62.6 respectively). At the same time, the percentage of the Lithuanian population having a long-standing illness or health problem is higher than in the Union as a whole (34.7% and 34.2% respectively in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities was in 2015 around 7%, below the EU-average (8.1%).

Dependency trends

The share of people depending on others to carry out activities of daily living in Lithuania is set to increase over the next 50 or so years, from 9.3% in 2015 to 12.2% of the total population in 2070, an increase of 31%. This is above the EU-average increase of 21%. From 0.27 million residents living with strong limitations due to health problems in 2016, a decrease of 21% is envisaged until 2070 to 0.21 million. That is in contrast with the increase in the EU as a whole (25%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is expected to increase. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors

is a projected increase in spending of about 1 pp of GDP by 2070 ⁽⁵³¹⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.6 pps of GDP by 2070.

Overall, Lithuania presents no significant risks of fiscal stress in the short, medium or long-term ⁽⁵³²⁾.

System Characteristics ⁽⁵³³⁾

In Lithuania there is no unified specific legislation on the provision LTC. Care is granted through different channels: social services, invalidity and sickness services. Social services are provided for all residents who are in need. Health care is provided on the basis of social insurance and financed by the central government budget, local budgets and the Health Insurance Fund, as well as cost-sharing from the recipient (or their family). LTC recipients are provided with benefits in kind, and there are also cash benefits for severely disabled people.

Public spending on LTC ⁽⁵³⁴⁾ reached 1% of GDP in 2016 in Lithuania, below the average EU level of 1.6% of GDP. 64.8% of the benefits were in-kind, while 35.2% were cash-benefits (EU: 84 vs 16%).

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 76% higher in Lithuania. Overall, 7.1% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%), one of the highest shares in the EU. On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets,

⁽⁵³¹⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf

⁽⁵³²⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁵³³⁾ This section draws on OECD (2011b) and ASISP (2014).

⁽⁵³⁴⁾ Long-term care benefits can be disaggregated into health-related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

possibly calling for greater needs of policy reform or, alternatively, relatively low benefits per recipients.

The expenditure for institutional (in-kind) services makes up 33.6% of public in-kind expenditure (EU: 66.3%), 66.4% being spent for LTC services provided at home (EU: 33.7%).

Administrative organisation

Long-term care in Lithuania is organised as a central system at national level supplemented by the municipalities at regional level. The central government is responsible for making long-term national programmes and strategies as well as setting requirements and standards. At the local level, municipalities prepare and implement municipal programmes aiming at social integration of disabled people, being responsible for the organisation of social services provision, the determination of local need for social services; for the supervision of social services as well as the organisation and provision of primary health care (including nursing hospitals). LTC is provided through day centres, home care services, residential social care institutions and nursing hospitals.

Types of care

Depending on their level of dependency and care needs, disabled people may receive permanent home care (assistance provided for recipients that continue living in their own home) or permanent nursing care in an institutional setting. LTC in the health sector is mostly provided as inpatient care in specialised nursing hospitals or in specific departments in general hospitals. During the period 2005-2010, the number of beds in separate nursing homes in the health care sector increased from 2,735 to 2,835, while the number of hospitals decreased from 59 to 49. During the same period, the total number of nursing beds (both in nursing homes and in other health care facilities) increased from 3,527 to 4,614.

Eligibility criteria

The need for LTC is assessed on the basis of principles of cooperation, participation, complexity, accessibility, social justice, relevance, efficiency, and comprehensiveness. The level of

need is assessed on an individual basis of the person's dependency level and potential to develop, taking into account the individual's preferences and needs. The social services are aimed at compensating the level of dependency. Home care and institutional care may also be provided to disabled people. The level of need of a disabled person is determined by an official list of health conditions. Provision of long-term medical treatment depends on the health condition. In the health care sector, LTC is mostly provided as inpatient services in separate nursing homes or specialised departments in general hospitals.

Co-payments, out of the pocket expenses and private insurance

Recipients contribute through cost-sharing to pay for LTC services in social care homes for elderly and disabled. No more than 80% of the recipient's income can be taken as payment. In most cases the difference will be covered by the central government and local budgets. Nursing hospital stays are financed by the Compulsory Health Insurance budget (up to 120 days per year). Longer stays can be paid by municipalities or by the recipients themselves.

Role of the private sector

In cases where local authorities are not able to directly provide LTC to a recipient, they may provide the recipient with 'money for care' that should enable them to buy the services needed from private providers. Cash benefits are only paid directly to the recipient. Compensation for home care nursing expenses was between 1.5 and 2.5 times the social insurance basic pension and depended as well on the need category of the recipient. Since 1 January 2007, this allowance has been set at 2.5 times the social insurance basic pension for all categories. The compensation for care corresponds to 0.5 times the social insurance basic pension. Cost-sharing of the provision of these services depend on the income of the recipient and/or their family.

Formal/informal caregiving

The recent extension of 'money for care' measures enables informal carers to be financially compensated (e.g. by care or attendance allowances) as providers of care for the care they

deliver. They can also benefit from some training and social rights, as well as from the recognition that informal carers are also often clients of formal care services, with their own need for support. The extensive use of both live-in and live-out migrant care workers is a relatively new trend in LTC provision. Their status is somewhere between the two distinct categories of formal and informal carers, and they may be initially selected by families on the basis of factors such as trustworthiness.

Prevention and rehabilitation policies/measures

Rehabilitation services are paid by the NHIF and provided by licensed providers. The first rehabilitation stage comprises those interventions provided at the health care facility where the patient is treated and its cost is included in the price of the treatment. Second stage rehabilitation is provided in specialised units in general hospitals as well as in specialised hospitals/sanatoriums. Rehabilitation units are required to have a minimum number of beds as well as service availability of 6 days per week. The third rehabilitation stage involves rehabilitation either in an outpatient or tertiary level setting. In 2010 there were 4 rehabilitation hospitals (with 705 beds in total) and 7 other medical rehabilitation facilities (3 for children and 4 for adults). The number of rehabilitation beds has increased since 2002 from 1092 in 2002 to up to 1378 in 2010. Beds in rehabilitation hospitals have an occupancy rate of at 80% with the Average Length of Stay (ALOS) being about 20 days. In sanatoriums the bed occupancy rate is lower (at 74%), while the ALOS is higher (21 days). Increasing quality and availability of rehabilitation provided in an outpatient setting is one of the goals in the strategic health policy documents. This is being implemented by establishing outpatient rehabilitation units in existing municipal health care facilities and making larger investments in infrastructure, as well as through regulatory measures such as forbidding primary health care providers from referring adult patients to specialised inpatient rehabilitation and instead directing patient flows towards outpatient rehabilitation. Since 2005 outpatient rehabilitation services have increased by 30% due to implementation of specific projects financed by Structural Funds and the establishment of

specialised departments for ambulatory rehabilitation.

Recently legislated and/or planned policy reforms

New Guidelines for Deinstitutionalisation of the Social Care Homes of Disabled Children Deprived of Parental Care and Adult Disabled Persons were approved at the end of 2012. These guidelines are meant to provide the framework until 2030 for transition from institutional LTC towards home care. The aim of deinstitutionalisation is to form consistent and coordinated system care services that create the conditions for each disabled child deprived of parental care and each disabled person to receive individual personalised services and assistance while remaining involved and participating in community life without experiencing social exclusion.

Ambulatory nursing and care services are relatively recent. Those services have been well received by the population and have improved access to long-term care services in Lithuania. As explained above, 'money for care' measures enable informal carers to be compensated for the care they deliver and to benefit from some training, social rights and recognition as recipients of care themselves.

As explained above, there is a duration ceiling of four months (120 days) per year on each inpatient nursing care episode (financed, as all services provided in public hospitals, by the National Health Insurance Fund (NHIF)). After this period patients can be transferred to the social care institution in their municipality. A proposal to increase the duration limit in the inpatient health care nursing departments from 120 to 180 days is currently under negotiation.

From 2010 special compensation for care expenses and special compensation for attendance expenses were reduced to the 85% level. Since 2014 there has been a debate about whether to restore to the 100% level.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities concerning the provision of long-term care services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to explore the potential of private LTC insurance as a supplementary financing tool; to determine the extent of user cost-sharing on LTC benefits.
- **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage; To provide targeted benefits to those with highest LTC needs.
- **Encouraging independent living:** To provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care; To improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers.
- **Supporting family carers:** To establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** To establish better coordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care coordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** To arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; To steer LTC users towards appropriate settings.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; To invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; To employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.17.1: Statistical Annex – Lithuania

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	21	24	29	33	27	28	31	33	35	37	37	12,451	13,213	13,559	14,447
GDP per capita, PPS	15.5	16.1	17.1	16.2	14.1	15.4	16.4	17.2	17.9	18.8	19.6	26.8	28.1	28.0	29.6
Population, in millions	3.4	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.2	0.2	0.3	0.5	0.7	0.6	0.5	0.5	0.5	0.5	0.5	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	93.1	92.8	89.8	89.7	91.9	113.8	122.7	264.1	283.2	352.1	373.6
As % of total government expenditure	0.7	0.6	0.9	1.2	1.5	1.4	1.2	1.3	1.3	1.5	1.5	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	77.4	77.1	77.2	77.6	78.7	78.9	79.3	79.6	79.6	80.1	79.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	65.2	65.0	64.5	65.9	67.1	67.6	68.1	68.4	68.5	69.2	69.2	76.6	77.3	77.7	77.9
Healthy life years at birth for females	54.6	56.5	58.1	59.6	61.2	62.3	62.0	61.6	61.6	61.7	58.8	62.0	62.1	61.5	63.3
Healthy life years at birth for males	51.4	52.6	53.3	54.5	57.2	57.4	57.0	56.6	56.8	57.6	54.1	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	33.5	31.7	30.7	29.7	28.1	29.0	29.6	31.2	32.3	34.7	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	10.3	9.4	7.9	7.6	7.0	8.0	8.2	8.2	7.6	7.0	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	32	40	48	56	56	57	61	61	61	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	7	38	69	100	102	104	67	68	69	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.2	2.4	3.7	5.0	5.2	5.4	4.3	4.4	4.5	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.17.2: Statistical Annex - continued – Lithuania

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	2.9	2.7	2.4	2.1	2.0	1.8	1.7	-40%	2%
Dependency									
Number of dependents in millions	0.27	0.27	0.26	0.26	0.26	0.23	0.21	-21%	25%
Share of dependents, in %	9.3	9.7	11.0	12.4	13.2	12.7	12.2	31%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.0	1.0	1.3	1.7	2.0	2.2	2.0	101%	73%
AWG risk scenario	1.0	1.1	1.6	2.3	3.3	4.1	4.6	360%	170%
Coverage									
Number of people receiving care in an institution	88,506	88,763	88,558	87,079	85,449	78,097	69,711	-21%	72%
Number of people receiving care at home	58,973	61,586	66,619	72,643	82,562	80,655	73,636	25%	86%
Number of people receiving cash benefits	55,425	55,934	57,427	59,841	63,148	60,259	55,399	0%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	7.1	7.5	8.9	10.4	11.8	12.0	11.6	63%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	75.8	77.5	81.1	83.9	89.9	93.8	94.4	24%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	78.7	77.9	79.7	80.8	81.6	82.3	81.4	3%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	21.3	22.1	20.3	19.2	18.4	17.7	18.6	-13%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	33.6	32.9	31.8	30.8	28.9	28.0	27.9	-17%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	66.4	67.1	68.2	69.2	71.1	72.0	72.1	9%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	8.6	8.2	9.2	10.3	11.0	11.7	11.3	31%	10%
Unit costs of home care per recipient, as % of GDP per capita	25.5	24.1	26.3	27.6	28.0	29.2	27.7	9%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	11.1	11.2	11.4	11.5	11.6	11.6	11.7	5%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.18. LUXEMBOURG

General context: Expenditure, fiscal sustainability and demographic trends

Luxembourg has roughly half a million inhabitants, less than 1% of the EU population. Despite its limited population, Luxembourg has the highest GDP per capita with 68.8 thousand PPS in 2015, which is almost 2.5 as much as the EU average of 29.6 thousand PPS for the same year. The population is projected to almost double in the next decades, reaching 1.0 million in 2070 from an initial value of 0.6 in 2016⁽⁵³⁵⁾. Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part)⁽⁵³⁶⁾ was, with 1.3% of GDP in 2016, below the EU average in the same year (1.6%). In 2015, public expenditure on long-term care (health) was 1.2% of GDP, in line with the overall EU level (1.2% of GDP).

Health status

In 2015 life expectancy at birth for both women and men was respectively 84.7 and 80.0 years and was slightly above the EU average (83.3 and 77.9 years respectively). In the same year, the healthy life years at birth were with 60.6 years (women) and 63.7 years (men) respectively below and slightly above the EU-average (63.3 and 62.6). At the same time, the percentage of the Luxembourgish population having a long-standing illness or health problem was significantly lower than in the Union as a whole (23.3% vs. 34.2% for the EU in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities has been increasing in the last few years, and has recently exceeded the EU-average (9.0% against 8.1% in 2015).

Dependency trends

The trends for dependency are increasing for Luxembourg over the next 50 years, as indicated by the projections. The number of people living with health limitations is projected to rise from 0.04 million in 2016 to 0.1 million in 2070, an increase of 141% compared to the EU value of

25% for that period. Similarly, the share of the dependent group in the whole population is foreseen to increase from 7.3% in 2016 to 9.8% in 2070; the corresponding change is higher than the EU average over the same period (36% vs. 21% EU average).

Expenditure projections and fiscal sustainability

The expenditure projections reveal a heightened requirement for spending in the future⁽⁵³⁷⁾. As far as demographic drivers are concerned, the "AWG reference scenario" forecasts public expenditure on long-term care as share of GDP to grow from 1.3 to 4.1, increasing by 2.8 pps. According to this scenario, the projected increase for Luxembourg over the period 2016-2070, 219%, is considerably higher than the EU average of 73%. The "AWG risk scenario", which captures additional cost drivers to demographic and health-status related factors, projects an increase of even bigger magnitude (5.2 pps) bringing public spending on long-term care from 1.3% to 6.5% of GDP by 2070, an increase of 405%, again well above the EU average of 170%.

Luxembourg faces low medium-term fiscal sustainability risks, primarily due to the initial low level of government debt and the favourable budgetary position, which compensate for the projected ageing costs. Over the long run however, Luxembourg faces high risks to fiscal sustainability. These risks are entirely driven by the necessity to meet future increases in ageing costs (notably pension, health care and long-term care expenditures)⁽⁵³⁸⁾.

System Characteristics

Long-term care insurance was introduced in 1999 as a new pillar of the social security scheme in order to cover needs of assistance and care for activities of daily living. The law was mainly inspired by the long-term care set up in Germany; however, the principle of classifying the dependent

⁽⁵³⁵⁾ Based on Eurostat projections.

⁽⁵³⁶⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

⁽⁵³⁷⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁵³⁸⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

persons into three levels was not upheld for Luxembourg.

There is a political commitment to the longest possible provision of home care, and the long-term care law is based on four principles: priority to home care, priority to benefits in-kind, priority to rehabilitation and prevention measures and continuity of long-term caregiving.

Administrative organisation

Benefits are granted to all persons covered by sickness insurance and, in addition, there is the possibility of voluntary insurance. Compulsory social insurance is financed by social contributions and by a State contribution (40% of total current expenditure), providing benefits to all persons recognised as being dependent, regardless of age, income or residence. Contributions to the long-term care insurance have to be paid at a rate of 1.4% on all earnings (including fringe benefits and capital) without any upper threshold.

The long-term care insurance also covers non-dependents. If a person is not technically classified as dependent, but needs assistance in the form of devices (e.g. wheelchair, walking frame) or a modification of the home (e.g. installation of a shower on one level) to support activities of daily living, these costs will be reimbursed.

The organisation of care insurance was entrusted to two bodies, namely the *Caisse Nationale de Santé* (CNS) and Administration d'évaluation et de contrôle de l'assurance dépendance (AEC).

The *Caisse Nationale de Santé* (CNS), the National Health Insurance, manages the budget for the long-term care and takes the decision about the care needed by long-term care beneficiaries and defined by the Administration d'évaluation et de contrôle de l'assurance dépendance (AEC - State Office for Assessment and Monitoring of the long-term care insurance). The Administration d'évaluation et de contrôle de l'assurance dépendance (AEC) latter is a public body under the authority of the Ministry for Social Security, and it is in charge of assessing the needs in activities of daily living and the other long-term care services and of designing care plans. Indeed, based on the assessment, it draws up a structured care plan providing the necessary assistance to those who

request it, depending on which form of care is the most appropriate, be it home or institutional care. AEC is also responsible for quality monitoring and for ensuring that the provided services match the needs of the dependent person. Lastly, AEC also has the task of providing informing and advising to protected persons and the bodies concerned on prevention and care of dependent persons. It comprises two consultation bodies:

- the Advisory Committee, composed of government representatives, representatives of beneficiaries and providers, social partners and the CNS, which consults on the evaluation of activities run by the care insurance, the regulations on technical aids, quality standards and the negotiation procedure of tariffs;
- the "Concerted Action", which gathers to examine the functioning of the care, care networks, institutions for elderly or disabled persons and propose improvements in the system. This brings together the ministers responsible for family affairs, health and budget or their representatives, organisations active in the fields of health, family and social action, and associations representing the beneficiaries of long-term care insurance.

Role of the private sector

Market entry to the care-giving sector is restricted to organisations approved by the Ministry of Family Affairs based on the fulfilment of certain quality standards and after adhesion to a framework contract with the National Health Insurance, which determines the rights and obligations for executing the nursing care services. The following types of care providers, mostly private, were registered by the end of 2016:

- 24 ambulatory networks offering nursing care at home;
- 53 day-care institutions;
- 42 intermittent-care centres for alternating short-term stays;
- 52 nursing homes and so-called integrated homes for elderly.

Eligibility criteria and user choices: dependency, care needs, income

Benefits under the dependency insurance are granted if the dependent person is in need of assistance and care for basic everyday activities for at least 3.5 hours per week and if his/her dependency condition is likely to last longer than six months or to be irreversible.

Co-payments, out of the pocket expenses and private insurance

The benefit package for long-term care is offered without any co-payment. If the beneficiary resides in an institution, the price of accommodation (board, lodging, basic domestic services, laundry, etc.) has to be paid by the resident ⁽⁵³⁹⁾. The government provides means-tested financial support for those residents in nursing homes and integrated homes for the elderly whose own revenues do not allow to cover for accommodation and services costs (*accueil gérontologique*). The medical component of these services is covered by the national health insurance according co-payments defined by statutes. The share of public spending on formal care dedicated to institutional care is above, but relatively close to the EU average (70.3% vs. 66.3% in 2016). However, when looking at unit costs per recipient (108.6 in 2016 vs 77.1 for the EU) Luxembourg seems to have a comparatively costly package for institutional care, which is also projected to increase above average up to 2070 (24% projected increase vs 10% for the EU). This points at an existing and increasing pressure to finance this service in fiscally sustainably way.

Formal/informal caregiving

Beneficiaries cared for at home can receive ADLs or domestic tasks (so-called in-kind services) that they are entitled to from professional carers or from informal caregivers of their choice (generally a family member). Both types of service provision can be combined, which represents the most preferred type of care provision (used by 63.4% of the home-care beneficiaries in 2016). Special support activities (*activités d'appui à l'indépendance*) and social care services

⁽⁵³⁹⁾ Introducing the concept of "Accueil gérontologique" (cf. <http://www.legilux.public.lu/leg/a/archives/2004/0070/a070.pdf#page=2>).

(individual or in group) can only be offered by professional caregivers. The share of formal in-kind spending going to home care was in 2016 slightly below the average, with 29.7% vs. 33.9% for the EU in the same year. This points to a potential rationalisation of expenditure, as normally home-care is a comparatively cost-effective way to provide long-term care (when institutionalisation can be avoided). Lower than average unit costs measured as a share of GDP per capita (24.3 in 2016 vs. 33.9 for the EU in 2016) also suggest that there is scope to shift resources towards home care and improve the system from a cost-efficiency profile. Although the number of beneficiaries is currently higher in the home care setting, more recently the number of persons in residential care has been increasing more rapidly, and this is projected to continue in the future at an accelerating rate which increases the projected budget impact of the institutional component of long-term care ⁽⁵⁴⁰⁾.

There are no figures available on the exact number of informal caregivers; however in 2016, a total of 6,609 beneficiaries received cash benefits or cash and in-kind benefits (79.1% of at-home care recipients). The long-term care insurance furthermore takes over the costs for counselling of the informal caregiver. However, in 2016 only 266 persons received counselling activities. Secondly, if the informal caregiver does not benefit from a personal pension, the long-term care insurance can pay the pension contribution of the informal caregiver (3,429 recipients until 2016) ⁽⁵⁴¹⁾.

Recently legislated and/or planned policy reforms

The government program of 2009 announced a review of the operation and the fiscal sustainability of the long-term care insurance with a report published in 2013. Following its publication, highlighting the fiscal sustainability risks related to the current features of the nursing care insurance, the government has decided to reform the system to ensure long-term fiscal viability, focussing on enhancing cost-efficiency. The debate, both in

⁽⁵⁴⁰⁾ Pacolet, J. and F. De Wispelaere (2018), ESPN Thematic Report on challenges in long-term care – Luxembourg. Brussels: European Commission - Directorate-General for Employment, Social Affairs and Inclusion.

⁽⁵⁴¹⁾ IGSS (2017), "Rapport général sur la sécurité sociale", Luxembourg.

Parliament and amongst stakeholders started in 2014.

Meanwhile, the 2014 Law setting State budget for 2015 financial year calls for a freeze of tariffs ⁽⁵⁴²⁾ at the 2014 level. In addition, a new collective agreement with an important revalorisation of the career of the nurses was negotiated in 2017. Due to this change, the fees per hour paid by the long-term care insurance will increase in 2018, and the annual impact is estimated to be an increase of 5%. In combination with the reform of the long-term care the expected impact amounts to an increase in long-term care spending of 8.2% of expenditures in 2018.

The reform, coming into force on 1st of January 2018 focuses on:

- simplification and standardisation of the evaluation process by combining LTC services and introducing flat-rates;
- new definition and grouping of LTC services and more focussed on ADL;
- new services reimbursed by LTC (ex: night guards);
- redefining the roles of informal caregivers and cash services strengthening the link between services given and those covered;
- development of a transparent and effective quality policy and control;
- the *Cellule l'Evaluation et d'Orientation* will be named *Administration d'évaluation et de contrôle de l'assurance dépendance* (State Office for Assessment and Monitoring of the long-term care insurance) and is placed under the authority of the Ministry of social security and is no longer attached at the administrative level of the General Inspectorate of social security.

Challenges

Luxembourg has a high quality system of long-term care, with high levels of satisfaction among users but important future sustainability issues to

tackle. The main challenges of the system appear to be:

- **Improving the governance framework:** to ensure long-term fiscal sustainability of the long-term care system, to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC service; to establish good information platforms for LTC users and providers.
- **Improving financing arrangements:** to face the increased LTC costs in the future e.g. by tax-broadening, which means financing beyond revenues earned by the working-age population; to foster pre-funding elements, which implies setting aside some funds to pay for future obligations.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits and the scope of coverage, that is, setting the types of services included into the coverage; to provide targeted benefits to those with highest LTC needs.
- **Encouraging home care** to continue to monitor and evaluate alternative services, including incentives for use of alternative settings.
- **Ensuring availability of formal carers:** to seek options to increase the productivity of LTC workers.
- **Changing payment incentives for providers:** to adapt provider payments for LTC, including the nomenclature of nursing care services, and consider a focused use of budgets negotiated ex-ante or based on a pre-fixed share of high-need users.
- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and

⁽⁵⁴²⁾ Measure no. 256 of the New Generation Budget (BNG).

financial incentives to discourage acute care use for LTC.

- **Improving value for money:** to encourage competition across LTC providers to stimulate productivity enhancements; to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and coordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.18.1: Statistical Annex – Luxembourg

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	30	34	37	38	37	40	43	44	46	50	52	12,451	13,213	13,559	14,447
GDP per capita, PPS	68.7	71.4	75.4	71.9	64.8	65.4	66.1	64.4	64.0	67.2	68.8	26.8	28.1	28.0	29.6
Population, in millions	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	1.1	1.0	1.0	1.1	1.2	1.2	1.0	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	620.4	720.7	750.5	778.7	792.1	264.1	283.2	352.1	373.6
As % of total government expenditure	2.5	2.6	2.5	2.7	2.6	2.7	2.4	2.7	2.7	2.8	2.8	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	82.3	81.9	82.2	83.1	83.3	83.5	83.6	83.8	83.9	85.2	84.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	76.7	76.8	76.7	78.1	78.1	77.9	78.5	79.1	79.8	79.4	80.0	76.6	77.3	77.7	77.9
Healthy life years at birth for females	62.4	62.1	64.6	64.2	65.9	66.4	67.1	66.4	62.9	63.5	60.6	62.0	62.1	61.5	63.3
Healthy life years at birth for males	62.3	61.2	62.3	64.8	65.1	64.4	65.8	65.8	63.8	64.0	63.7	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	23.6	26.1	24.4	22.0	21.9	20.9	20.2	23.6	22.7	23.3	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.9	6.7	6.9	6.2	6.0	6.0	5.8	7.8	7.8	9.0	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	3	3	4	4	4	5	4	4	5	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	4	5	6	7	7	7	9	9	9	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.6	1.8	2.0	2.2	2.2	2.3	2.4	2.5	2.5	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	2	2	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.18.2: Statistical Annex - continued – Luxembourg

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	0.6	0.6	0.8	0.9	0.9	1.0	1.0	78%	2%
Dependency									
Number of dependents in millions	0.04	0.05	0.06	0.07	0.08	0.09	0.10	141%	25%
Share of dependents, in %	7.3	7.3	7.8	8.3	9.0	9.5	9.8	36%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.3	1.4	1.6	2.0	2.8	3.5	4.1	219%	73%
AWG risk scenario	1.3	1.4	1.8	2.5	3.7	5.0	6.5	405%	170%
Coverage									
Number of people receiving care in an institution	4,705	5,470	7,270	10,365	14,882	19,120	22,939	388%	72%
Number of people receiving care at home	8,906	9,925	13,066	17,190	21,878	25,726	29,223	228%	86%
Number of people receiving cash benefits	1,789	1,993	2,549	3,191	3,935	4,582	5,131	187%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	2.6	2.7	3.0	3.6	4.3	5.0	5.5	109%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	36.4	37.2	38.7	42.6	48.1	52.5	56.1	54%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	97.5	97.5	97.6	97.9	98.3	98.5	98.6	1%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	2.5	2.5	2.4	2.1	1.7	1.5	1.4	-43%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	70.3	70.7	70.7	71.5	72.7	73.6	74.1	5%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	29.7	29.3	29.3	28.5	27.3	26.4	25.9	-13%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	108.6	109.7	112.4	119.2	125.2	131.3	134.8	24%	10%
Unit costs of home care per recipient, as % of GDP per capita	24.3	25.0	25.9	28.7	32.0	35.1	37.0	53%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	10.5	11.0	11.2	11.4	11.6	11.7	11.8	13%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.19. MALTA

General context: Expenditure, fiscal sustainability and demographic trends

In 2015, the GDP at market prices in PPS per capita stood at 24,200, which is below the EU average of 29,600. Population was estimated by Eurostat at 0.4 million in 2016 and it is expected to reach half a million by 2070 with the fastest expansion occurring in the next years.

Health status

Life expectancy at birth with 84.0 years for women and 79.7 years for men is above the respective EU averages of 83.3 and 77.9 years in 2015. Healthy life year expectancy is very high with 74.6 years for women and 72.6 for men in Malta versus 63.3 and 62.6 in 2015 in the EU. The percentage of the population in 2015 having a long-standing illness or other health problem is lower than in the Union (29.2% in Malta against 34.2% in the EU). The percentage of the population indicating a self-perceived severe limitation in daily activities stands at 2.5%, which is considerably lower than the EU-average (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase significantly over the coming 60 years. In 2016, the number of dependent people stood at 17,000 and is projected to increase by 108% to 37,000 by 2070. That is a steeper increase than in the EU as a whole (25%). Also, as a share of the population, the dependents are becoming a bigger group, from 3.5% to 6.2%, an increase of 74%. This is much more than the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.4 pps

of GDP by 2070 (EU: 1.2 pps) ⁽⁵⁴³⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.3 pps of GDP by 2070 (EU: 2.7 pps).

Medium fiscal sustainability risks appear for Malta over the long-run. These risks are entirely related to the strong projected impact of age-related public spending (notably pensions, healthcare and long-term care) ⁽⁵⁴⁴⁾.

System Characteristics

Public provision of LTC is provided at both central and regional levels. In addition, there are also private residential homes and several day centres for the elderly and persons with disabilities. There has also been an expansion in the provision of community-based services and residential care places. In 2013, the number of licensed beds in LTC institutions amounted to more than 4,000.

Public spending on LTC ⁽⁵⁴⁵⁾ reached 0.9% of GDP in 2015 in Malta, below the EU average of 1.6% of GDP. 0.7% of GDP was spent on in-kind benefits (EU: 1.4%), while 0.2% of GDP were provided as cash-benefits (EU: 0.2%). It is not clear which role private co-payments for formal in-kind LTC play in the financing of LTC services.

Types of care

The expenditure for institutional (in-kind) services makes up 85% of public expenditure (EU: 56%), 15% being spent for LTC services provided at home (EU: 28%). Institutional care is relatively costly, Member States with high shares of spending in institutional care may benefit from efficiency gains by shifting some coverage (and

⁽⁵⁴³⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁵⁴⁴⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁵⁴⁵⁾ Long-term care benefits can be disaggregated into health-related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

thus expenditure) from institutional to other types of care.

Eligibility criteria and user choices: dependency, care needs, income

Eligibility for long-term care in state-run institutions that cater for permanent residents is granted to persons over 60 years and/or those with a disability that leaves them unable to cope with living within their own home. For all cases, eligibility is determined by a multi-disciplinary evaluation. Cash and in-kind benefits are partly means-tested and others are needs-based, with the majority being of a needs-based type.

Prevention and rehabilitation measures

Acknowledging the importance of preventive strategies that target the elderly, a vast range of community care services exist in Malta, which are intended to enable the elderly to continue living at home and/or in his community. Amongst such services, one can cite as examples: (a) the *Telecare Plus Service* which allows the subscriber to call for assistance when required; (b) the *Meals on Wheels*, which supports elderly persons and others who are still living in their own home but who are unable to prepare a decent meal. The system was successfully overhauled in 2016, which in turn resulted in the introduction of menus which are sensitive to client needs and demands, and the elimination of a significant waiting list which existed prior to the reform; (c) a *Handyman Service* that helps older adults and persons with special needs to continue living as independently as possible in their own home by offering a wide range of repair jobs; (d) a *Home Help Service* which offers non-clinical, personal help and light domestic work to older adults.

The past years saw the consolidation of a number of traditional services and the introduction of a series of new ones to meet the emergent client needs. Improvement in operations resulted in service user gains in *Home Help, Handyman, Night Shelters and Continence service*, while technological improvements made it possible to develop *Telecare* (where beneficiaries approximate 9,000 persons).

Dementia has been put on the national agenda by launching the National Dementia Strategy (2015-

2023). Implementation of this strategy saw appointment of a *Dementia Care Coordinator* and the setting up of *Dementia Intervention Teams*, multi-disciplinary team specialising in Dementia Care and support for families caring for older persons with Dementia.

“Dementia Day Centres” provide specialised day care for persons with dementia and offer respite to carers who have family members. Options are being considered to open similar facilities in different parts of the island. *“Memory Cafés”* were introduced in 2017 as an innovative concept where informal carers are provided with informal support from professionals and other people going through the same experience.

“Respite in care homes” is a highly demanded community service. The number of beds available for this service has nearly doubled over the past year such that 30 respite beds are available in eight care homes to meet clients’ needs and requests. *“Respite at Home”* was launched in May 2017, where the family is provided with a qualified carer to provide respite in their own home. Different modes of service provision are offered to suit family needs.

The *“Carer at Home Scheme”* was launched in 2016 to reimburse families who employ a qualified carer to care for an older person within a community setup. The range of domiciliary care services was extended in 2016-2017 through the introduction of physiotherapy, occupational therapy, podiatry and a geriatrician service for home-bound persons. A total of 1,700 new referrals were received and followed until October 2017 (a total of 1450 in 2016).

Efforts are ongoing to make effective use of community based services. This achieved through policies and procedures, professional assessment, follow-up and communication, which control abuse without limiting access for persons who genuinely require domiciliary care.

Rehabilitation services are key to reduce pressure on acute care services while delaying institutionalisation and securing the availability of beds allocated for long-term nursing care. Older patients admitted to Mater Dei Hospital are referred and considered for transfer and further management as necessary. The aim is to continue

their medical and nursing care, promote mobilisation and help regain functional independence. An interdisciplinary team approach helps provide holistic care and enable reintegration into the community.

Formal/informal care-giving

Informal care plays an important role in Maltese society, due to the strong traditional role of the family. Support measures offered to informal carers in Malta include a combination of cash benefits and care leave. Respite and support for informal carers is provided through benefits in-kind via community services and the "Commcare" unit, which provides assessment and case management services via a team of nurses, allied health professionals, social workers and carers who provide services to clients that are house-bound.

Recently legislated and/or planned policy reforms

Malta is in the process of implementing a National Strategic Policy for Active Ageing (2014-2020), namely within three distinct pillars: active participation in the labour market; social participation; and independent living.

With regards to the first pillar, the policy supports employers to assist the ageing workforce to remain active and productive within the labour market. It also supports the ageing employees to continue to develop their skills in order to meet the changing needs of the work organisation. The second pillar focuses on financial security in old age, encouraging active participation in society, which includes volunteering, grandparenthood, and involvement in civic engagement. The policy promotes lifelong learning and offers support to informal carers and inter-generational solidarity. The third pillar promotes independent living and addresses health prevention and promotion within the community sector. It links acute and geriatric rehabilitation, psychiatric mental health and well-being with community care services. It further promotes age-friendly communities to support good quality of life for older people within society. It finally looks at issues on abuse and end-of-life care.

Several initiatives and programs within this National Strategic Policy have been implemented, or are in the process of being, implemented.

Amongst the initiatives which support participation in the labour market, a seminar was held in collaboration with the Occupational Health and Safety Authority to promote occupational health and safety principles that foster the employability of older and age workers up, and even subsequent, to statutory retirement age. Pre-retirement programs were held with different entities to assist in the smooth transition to retirement. Several initiatives were held to encourage social participation by older adults. Associations of members of day centres and associations of residents in residential homes have been set up to strengthen the voice of vulnerable groups. Active ageing centres have been piloted and set up on a permanent basis and are now being transformed into lifelong learning hubs and collaboration with local councils is ongoing to set up new Active Ageing hubs which provide informal learning opportunities to older adults. Similar sessions are also being held in residential homes for the elderly.

Collaboration with the Malta Communications Authority is ongoing and several information and communication training programs are held based on best practice models so as to support digital inclusion. Older adults are encouraged to lead an independent and active life while support is provided to those who are frailer. Information sessions for informal carers of older persons and information sessions for informal carers of persons with dementia were held. Community services, including respite service, are being reinforced to support older adults to continue living in their own homes. Innovative financial support models for personal care at home have been introduced. Several intergenerational programs are held including programs with Malta College of Arts, Science and Technology (MCAST), main stream and special schools, and with Eko Skola (Eco-Schools). "*Mill-Anzjan għall-Anzjan*" (from Elderly to Elderly) is a pilot project which was designed and launched with the aim of encouraging older citizens in to care for and assist older persons who live with the same community where they live. The outcome of this project is being evaluated.

With regards to the second and third pillars, the government has also undertaken various measures to enhance long-term care and services for the elderly. These measures include: (a) National minimum standards for residential homes to ensure adequate environment and care of residents; (b) the upgrading of the national “Telecare” service to “Telecare Plus”, which now offers valuable additions and also the upgrading of the pendant to a ‘smart accessory’; (c) a ‘carer at home’ programme that provides older persons with full-time carers to support them to live in the community. Besides, the government also offers a number of respite beds at various care homes to alleviate the responsibilities of informal carers towards their elder relatives. “Respite at Home” was launched in May 2017, where the family is provided with a qualified carer to provide respite in their own home. Different modes of service provision are offered to suit family needs. Moreover, the majority of care homes were upgraded to nursing homes and have also undergone refurbishment and have been upgraded with wi-fi facilities.

In order to raise more awareness, two seminars were held, one on end-of-life care and the other to raise recognition of elder abuse and neglect. Leaflets have been distributed to the general public. Lectures on crime prevention related to older persons are being provided with the cooperation of the Malta Police Force.

In relation to dementia, the measures undertaken include: (a) the setting up of a dementia intervention team to further support persons with dementia in the community; (b) the opening of a dementia day activity centre at St Vincent de Paule Residence for the elderly and a dementia centre in Gozo, the second largest island of the Maltese archipelago; and (c) the introduction of a 24/7 dementia helpline service (d) establishing a National Commission on Dementia. Moreover, a pilot programme on dementia friendly communities has been running since January to December 2016 while booklets on dementia were published targeting both the general public as well as informal carers.

In addition to pursuing a policy of active ageing, other policy initiatives are being pursued in order to further improve the provisions of long-term care

and services offered in the country. Some of the new policy initiatives are hereby reported.

After the publication of the White Paper on National Minimum Standards for care homes for older people, the standards have been published. Enforcing legislation has also been drafted and is being vetted prior to presentation to Cabinet of Ministers.

The National Dementia Strategy has been published and is already being implemented (see measures above). As part of a comprehensive strategy for elderly care, Malta is also embarking on a new service dealing with geriatric mental health rehabilitation. Policy guidelines have been recently adopted at the state run St. Vincent de Paul Residence for the elderly, which caters for long term residential and nursing care. The intention is to have these policy guidelines adopted by other government residential and nursing homes.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers.
- **Improving financing arrangements:** to foster pre-funding elements, which implies setting aside some funds to pay for future obligations; to explore the potential of private LTC insurance as a supplementary financing tool.
- **Encouraging home care:** to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation

controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care.

- **Encouraging independent living:** to explore alternative services which encourage independent living, provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** to establish better coordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.19.1: Statistical Annex – Malta

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	5	5	6	6	6	7	7	7	8	8	9	12,451	13,213	13,559	14,447
GDP per capita, PPS	21.9	21.7	22.5	22.1	20.6	21.3	21.1	21.3	21.5	22.5	24.2	26.8	28.1	28.0	29.6
Population, in millions	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	:	:	:	:	:	0.8	:	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	:	192.9	:	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	:	:	:	:	:	1.9	:	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	81.4	82.0	82.2	82.3	82.7	83.6	83.0	83.0	84.0	84.2	84.0	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.3	77.0	77.5	77.1	77.9	79.3	78.6	78.6	79.6	79.8	79.7	76.6	77.3	77.7	77.9
Healthy life years at birth for females	70.4	69.5	71.1	72.1	71.0	71.3	70.7	72.2	72.7	74.3	74.6	62.0	62.1	61.5	63.3
Healthy life years at birth for males	68.6	68.3	69.2	68.8	69.4	70.1	69.9	71.5	71.6	72.3	72.6	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	20.3	24.9	24.7	27.5	28.5	30.4	30.5	29.5	28.2	29.2	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	4.0	3.3	2.6	3.7	3.9	4.0	3.1	3.2	2.8	2.5	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	2	5	7	10	10	10	1	1	1	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	9	7	5	4	4	4	8	8	9	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	2.7	2.9	3.1	3.3	3.3	3.4	2.2	2.2	2.3	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.19.2: Statistical Annex - continued – Malta

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	0.4	0.5	0.5	0.5	0.5	0.5	0.5	19%	2%
Dependency									
Number of dependents in millions	0.02	0.02	0.02	0.03	0.03	0.03	0.03	108%	25%
Share of dependents, in %	3.5	3.8	4.7	5.3	5.4	5.6	6.2	74%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	1.0	1.3	1.6	1.8	2.0	2.3	154%	73%
AWG risk scenario	0.9	1.0	1.4	1.9	2.4	3.0	4.2	364%	170%
Coverage									
Number of people receiving care in an institution	3,973	4,725	7,126	9,314	9,942	10,678	12,529	215%	72%
Number of people receiving care at home	8,092	9,353	13,021	15,591	16,419	17,528	19,601	142%	86%
Number of people receiving cash benefits	4,679	4,818	5,634	5,596	5,482	5,350	5,224	12%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.8	4.2	5.3	6.0	6.2	6.5	7.2	87%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	80.0	81.4	84.8	88.0	89.2	90.7	92.3	15%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	20.0	18.6	15.2	12.0	10.8	9.3	7.7	-61%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	85.0	85.3	86.0	86.8	86.8	86.9	87.2	3%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	15.0	14.7	14.0	13.2	13.2	13.1	12.8	-15%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	67.3	64.8	66.5	67.8	70.2	74.8	76.5	14%	10%
Unit costs of home care per recipient, as % of GDP per capita	5.8	5.7	5.9	6.2	6.4	6.9	7.2	23%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	16.8	17.0	17.5	17.7	17.8	17.6	17.6	5%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.20. THE NETHERLANDS

General context: Expenditure, fiscal sustainability and demographic trends

The size of the population in the Netherlands in 2016 accounted for 3.4% of the total EU population, and it is projected to increase up to 19.6 million by 2070⁽⁵⁴⁶⁾. In 2015, it generated a GDP of roughly €83 billion or 4.7% of the GDP of the Union as a whole. With a GDP per capita of almost 36,000 PPS per capita, the Netherlands is also among the richest Member States (EU 29,610 PPS in 2015). Public expenditure on long-term care (health and social part)⁽⁵⁴⁷⁾ was in 2016 with 3.5% of GDP, more than double the EU average of 1.6%.

Health status

Life expectancy at birth for both women and men is respectively 83.2 and 79.5 years, above the EU average for men and broadly in line for women in 2015 (83.3 and 77.9 years respectively). As for the healthy life years at birth however, these are lower than the EU-average both for women and for men, though more markedly for females, with 57.2 years vs 63.3 for the EU; for men, the 2015 value is of 61.1 vs. 62.6 years for the EU. At the same time, the percentage of the Dutch population having a long-standing illness or health problem is slightly higher than in the Union as a whole (35.3% and 34.2% respectively). The percentage of the population indicating a self-perceived severe limitation in its daily activities is also lower than the EU-average (7.3% vs. 8.1% in 2015).

Dependency trends

The amount of people living in the Netherlands depending on others to carry out activities of daily living is projected to significantly increase over the coming decades. From slightly less than 1.16 million residents living with strong limitations due to health problems in 2016, an increase of 42% is envisaged until 2070 to approximately 1.64 million. That is a steeper increase than in the EU as a whole (25% for the EU over the same period). Also as a share of the population, the dependents

are expected to become a bigger group, from 6.8% to 8.4% by 2070, an increase of 24%, which is also higher than the EU-average projected increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes in the Netherlands, the public expenditure on long term care as a percentage of GDP is projected to steadily increase by 2.5 pps, from 3.5 percent in 2016 to 6.0 percent in 2070 in the "AWG reference scenario"⁽⁵⁴⁸⁾. In this scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The "AWG risk scenario", which captures in addition the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 4.8 pps of GDP by 2070. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure. The long-term fiscal sustainability risk indicator S2, which shows the adjustment effort needed to ensure that the debt-to-GDP ratio is not on an ever-increasing path, is at 3.0% of GDP. In the long term, the Netherlands therefore appears to face medium fiscal sustainability risks. This is primarily related to the projected increase in the costs of ageing where in particular the projected increase in long-term care costs contribute 2.0% of GDP to the indicator⁽⁵⁴⁹⁾.

System Characteristics

In the Netherlands, a system of public long-term care insurance had been in place since 1968 until recent years. Everyone who lived in the Netherlands was insured under the AWBZ (Algemene Wet Bijzondere Ziektekosten; Exceptional Medical Expenses Act). The AWBZ covered not only care for the elderly, but in principle all chronic care, especially concerning large expenses where insurance on a private market would not be feasible. This act covered at-

⁽⁵⁴⁶⁾ Based on Eurostat projections.

⁽⁵⁴⁷⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

⁽⁵⁴⁸⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁵⁴⁹⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

home care and care in institutions for the elderly, institutions for the mentally and physically handicapped and institutions for chronic psychiatric patients. Some form of income-dependent cost-sharing existed for practically all long-term care services. Moreover, in institutions a contribution had to be paid for the comprehensive package of care and board and lodging. However, in 2016, the Netherlands spent a very high share of long-term care public spending on institutional care (92.7%), which is largely above the average of 56% for the EU in the same year. This points to an inefficient use of resources, as institutional care is typically the most expensive way to provide long-term care. Looking more closely at the figures for institutional care, unit costs per recipient, measured as a share of GDP per capita, stood at 185 in 2016, which is more than double the EU average of 77.1 for the same year. This measure expresses the pressure on the budget deriving from the current provision of institutional care and suggests that there is ample scope to improve long-term care provision from a cost-efficiency perspective. Accordingly, the long-term care system has recently undergone a major reform with the aim to promote and support independent living. Indeed, the Netherlands spent in 2016 only 7.3% of the total long-term care budget is spent on home care, and, with unit costs of 8.4, home care stands well below the EU average value of 33.9 in terms of unit cost per recipient as a share of GDP per capita, which suggests that shifting resources to this mode of provision could be an efficiency enhancing measure.

The Exceptional Medical Expenses Act, close to becoming unmanageable due to the breadth of covered services, was repealed. Whereas some of those previously covered under this act are currently covered under the Health Insurance Act, the Social Support Act (Wmo) or the Youth Act, the most vulnerable categories, i.e. those requiring permanent supervision or 24-hour care nearby, are entitled to care services under the Long-Term Care Act (Wlz).

Administrative organisation

The Exceptional Medical Expenses Act (AWBZ), in place since 1968, used to cover the bulk of expenditures, and was a truly national and largely contribution-based scheme which covered for the costs of personal and nursing care, guidance,

accommodation and, on certain conditions, even medical treatment. The basket of covered benefit had grown to such an extent over time that the system was close to becoming unmanageable in the previous setting. In 2007, the provision of home help for domestic activities was delegated to the municipalities as part of a broader decentralising pattern. In 2015, the Exceptional Medical Expenses Act was repealed and was replaced in its scope by other acts like the Social Support Act (Wmo), the Health Insurance Act (Zvw) and Youth Act. Under the Wmo, the local authorities are in charge of provision of care and of the needs assessment, which they formulate based on an interview with the citizen.

The Long-Term Care Act (Wlz), a compulsory health insurance policy based on solidarity, focusses a smaller group of high-need individuals. The amount of the premium is (9.65%) of the income tax, with a ceiling of 33,589 euros. In addition, there is an income-dependent co-payment for adults. This depends on whether the client lives at home or in a care facility, is younger or older than 65, and is single, married or has a domestic partner.

Under the Wlz, 31 regional care offices (*zorgkantoren*) are in charge to provide care purchased with public funds. The agencies are generally independent subsidiaries of the dominant health insurer in each region. Although they have a contracting budget, these agencies have no funds of their own (except for administrative costs), as care providers are directly paid from a general public fund on the basis of contracts concluded with the agencies. Hence, purchasing agencies bear no financial risk on purchasing care. All contributions collected under Wlz are deposited into the Long-Term Care Fund, which is managed by the National Healthcare Institute. The central government tops up the fund using public funds if these funds are too low. Although the care costs are paid from the Wlz fund, the care offices are charged with keeping costs within the national and regional budget and with purchasing care as efficiently as possible. In addition, the purchasing agencies can set quality standards and check services invoiced by the healthcare providers match the required standards. All long term care tariffs are regulated by the Dutch Healthcare Authority (NZA). The NZa set maximum prices,

where under bargaining between purchasing agencies and providers is allowed.

Types of care

The main recipients of long-term care include persons with learning, physical or sensory disabilities, elderly persons and persons with psychiatric disorders. The Long-Term Care Act (Wlz) covers the most vulnerable categories, i.e. those requiring permanent supervision or 24-hour care nearby, providing a broadly defined set of services including residential care. The Wmo covers a broad package of services, such as personal care, nursing and domiciliary care for individuals that need assistance but are not as severe cases. All these services (including treatment and stay in an institution) were previously delivered under AWBZ.

Most clients apply for care-in-kind, but since the mid-1990s they may also opt for a personal budget to purchase health services privately (under both Wlz and Wmo). The cost explosion of the personal budget scheme from 413 million euro in 2002 to 2.2 billion in 2010 highlights the popularity of this scheme. However, experts worry that it did not equally lower the demand for in-kind care and also tends to crowd out informal care.

In providing support under the Social Support Act, the local authorities distinguish between general provisions and personalised provisions. General provisions are designed for the community and cover a range of services from recreational activities to transportation. Personalised provisions are designed for a single person; this might include domestic assistance and support. Currently, the assistance is aimed at being able to live independently (for example, help with organising the household or with administration).

To facilitate the elderly living at home (as opposed to living in a rest home or care institution), the government encourages municipalities, social housing associations and care institutions to build homes adapted to the needs of older people. Accessible local care also plays a part in helping the elderly to be independent for as long as possible. In order to achieve this, a new focus has been placed on creating local health care networks where general practitioners, nurses and other care

givers cooperate in offering custom care to patients.

Eligibility criteria

Patients' eligibility for Wlz care is assessed by an independent Care Assessment Centre (CIZ). There are no financial incentives for CIZ: its financial position is not affected by its decisions. CIZ's task is to carry out independent, objective and integral assessments. The procedure is the same for care reimbursed in cash and for in-kind care. CIZ adopts certain standards to determine different 'profiles' (packages), in which the eligibility is determined on the needs and characteristics of the client.

The centre decides if patients are eligible for Wlz care and how much care they are entitled to. Once assessed, patients can opt either to receive in-kind care (either in an institution or at home) or a cash benefit ("personal budget") that is roughly equivalent to 100% of the care related costs of in-kind care. The cash-reimbursement option is not commonly used for treatment and stay in an institution, except for some small-scale initiatives. For most of the budget, patients are obliged to be able to show that they did spend the money on care. Out of the 2016 budget of 19.9 billion, 1.3 billion is the amount attributed to the personal budget. Based on these figures, cash benefits amount to roughly 6.5% of total expenditure for Wlz⁽⁵⁵⁰⁾.

Clients who prefer in-kind care have some say with regard to which care organisation delivers their care, however, the responsibility for organising and purchasing this care remains with the 'zorgkantoren' (regional care offices).

Under the Wmo, the local authorities are in charge of delivery and discuss the client's request for support together with the client. It is then up to the local authority to provide the appropriate type of support and determine how this support is to be organised. People can either contact the local authority or be referred by a GP. A meeting is set-up to assess the request for support, in light of

⁽⁵⁵⁰⁾ <https://www.rijksoverheid.nl/onderwerpen/prinsjesdag/documenten/begrotingen/2015/09/15/xvi-volksgezondheid-welzijn-en-sport-rijksbegroting-2016>, p.138.

factors such as the possibility of the individual to draw on their personal network or on a general provision. Hence the local authority decides whether to accept or reject a request of support, which, if granted, can materialise into services of a personal budget with or without a co-payment. As for the financing, the local authorities receive funds from the central government through the Municipal Fund, which they can allocate to services discretionally. They then pay providers for services or transfer funds to the Social Insurance Bank for personal healthcare budgets.

Co-payments, out of the pocket expenses and private insurance

The long-term care system is funded by social security premiums, taxes and co-payments. Since co-payments are income- and wealth-dependent, care users will not run into severe financial difficulties. But it is quite well possible that persons in institutions have to contribute so much that they just have 'a clothing allowance and pocket money' left to spend according to their own preferences. At the same time, the income-related co-payment covers only a small portion of the total costs of long-term care (10% of total for Wlz in 2015).

Role of the private sector

Institutional care providers must be non-for-profit organisations, while the home care market has been opened to for-profit companies.

Formal/informal caregiving

Since its inception in 1968, the Exceptional Medical Expenses Act has been expanded and improved. However, long-term care has also changed in its nature and extent through a whole range of supplementary regulations. This has led to an increased demand for care, rising costs and a sizeable bureaucracy. Moreover, it has led to a system that is aimed too much at the provision of care (by institutions) and too little on the patient. In some cases, the appeal for Exceptional Medical Expenses Act care has increased needlessly, without clear benefits for the patients. There is also the threat of a shortage of care workers. In 2010 there were 1.3 million employees in the care and welfare sector. According to calculations by the National Institute of Public Health and

Environmental Protection (Rijksinstituut voor Volksgezondheid en Milieuhygiëne or RIVM), over the coming 15 to 20 years at least 400,000 extra care providers will be needed in the care sector alone, if the policy remains unchanged. At the same time, the working population will decline during the coming decades. To respond to this future challenge, the Netherlands has carried out projections of future needs for carers, and is implementing a reorganisation of the labour force (including financial support for institutions) in long-term care. Nonetheless, given the size of the challenge, this area deserves regular monitoring. During the last few years there have been several reports published in which the conclusion is put forward that measures were needed in order to allow the Exceptional Medical Expenses Act to take future developments into account. Besides these reports, analyses have also been compiled within the care sector itself by organisations such as ActiZ (organisation for care providers in the Netherlands) as well as a collaboration of client organisations, which show that the Exceptional Medical Expenses Act does not make sufficient use of the strengths of the people involved and those around them.

Recently legislated and/or planned policy reforms

The main objective of the recent reform of long-term care was to guarantee its fiscal sustainability in future. As such, substantial cuts were made in the system, including the delisting of day care and personal counselling under the Awbz, lifting the entrance barrier of residential care for persons with severity-package 1-3 and a substantial reduction of the state budget for municipalities to carry out the Wmo.

The reform of long-term care includes a radical revision of the institutional structure. The most important changes are: (a) decentralisation of non-residential (extramural) long-term support to municipalities under the new Wmo, (b) the abolishment of the Awbz and the simultaneous introduction of the Long-term Care Act (*Wlz: Wet Langdurige Zorg*) to cover care for the most vulnerable and (c) the transfer of personal care at home from the Awbz to the Health Insurance Act (for people who are not meeting the Wlz criteria). In addition, municipalities are attributed the

responsibility for most ⁽⁵⁵¹⁾ of the youth care as established by the new Youth Law approved in 2014. The reform of long-term care has not only institutional and budgetary implications but also a *normative* component consisting of three main elements emphasising the importance of individual responsibility, encouraging and promoting independent whenever possible.

The first significant step was the introduction of the Wmo in 2007, a key element of which was the decentralisation of parts of long-term care from the AWBZ to municipalities, which became responsible for household cleaning. Under the arrangement municipalities must give support to people who cannot run a household on their own and participate in social life. Each municipality has discretionary power as regards need assessment, which may lead to unequal access.

Later on, *some non-residential (extramural) services in LTC* were transferred to municipalities (and insurers), and, together with a 40% cut in the budget for household cleaning, a revision of the Wmo along the following lines was adopted:

- the Wmo stresses individual and social responsibility;
- municipalities are responsible for the implementation of the Wmo;
- the municipalities deliver tailor-made services (*maatwerk*) based on a need assessment procedure (*keuken-tafelgesprek*);
- the municipalities decide on whether to assign a personal budget;
- means-testing is forbidden, but municipalities can set co-payments.

Wlz ⁽⁵⁵²⁾ is set up as a social health insurance scheme based on income contributions and covering the entire population, who has a right to long-term care subject to need. As for the range of benefits, the Wlz covers either services in-kind or

⁽⁵⁵¹⁾Some aspects of youth care are regulated under Zvw or Wlz.

⁽⁵⁵²⁾It covers groups of people that need constant assistance due to the nature of the condition or to the risk that the condition would worsen with lack of support and supervision.

a personal budget or a total package at home (*volledig pakket thuis*). The system of severity-adjusted packages (*zorgzwaartepakketten*) remains in place. The new Wlz has many features in common with the former Awbz. For instance, the care offices have been preserved and are in charge of contracting LTC providers, the system of regional budgets is still in place and the Nza sets maximum tariffs.

It is yet not known whether the reform of the long-term care has started to deliver results and quantifications of projected savings are not yet available. In terms of fiscal sustainability this therefore leaves the Netherlands exposed to the high long-term risks driven by the projected increase in long-term care spending mentioned above.

Challenges

The Netherlands has undergone a major reform of the long-term care system to tackle the high projected costs of its long-term care system while preserving quality. The following are acknowledged as the main challenges for the Dutch long-term care system and many are included in their policy agenda:

- **Improving the governance framework:** to ensure a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities concerning the provision of long-term care services; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to consider reviewing the extent of user cost-sharing on LTC benefits or to consider pre-funding elements, which implies setting aside some funds to pay for future obligations.
- **Support independent living:** to provide effective home care, tele-care and information

to recipients, as well as improving home and general living environment design.

- **Supporting family carers:** to further the efforts in establishing policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring availability of formal carers:** further the efforts in determining current and future needs for qualified human resources and facilities for long-term care, with a focus on ensuring their future availability.
- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination, to encourage competition across LTC providers to stimulate productivity enhancements.
- **Prevention: to promote healthy ageing and preventing physical and mental deterioration of people with chronic care;** to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.
- **Improving administrative efficiency.**

Table 3.20.1: Statistical Annex – Netherlands

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	546	579	613	639	618	632	643	645	653	663	683	12,451	13,213	13,559	14,447
GDP per capita, PPS	34.4	35.6	37.2	36.7	33.8	34.1	34.7	34.8	34.7	34.7	36.0	26.8	28.1	28.0	29.6
Population, in millions	16.3	16.3	16.4	16.4	16.5	16.6	16.7	16.7	16.8	16.8	16.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	2.0	2.0	2.1	2.2	2.7	2.7	2.7	2.7	2.7	2.6	2.4	1.1	1.2	1.2	1.2
Per capita PPS	638.0	675.9	780.6	834.4	824.5	826.7	840.8	942.4	921.7	921.8	859.0	264.1	283.2	352.1	373.6
As % of total government expenditure	4.6	4.5	5.0	5.1	5.5	5.6	5.7	5.8	5.7	5.7	5.2	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	81.7	82.0	82.5	82.5	82.9	83.0	83.1	83.0	83.2	83.5	83.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.2	77.7	78.1	78.4	78.7	78.9	79.4	79.3	79.5	80.0	79.9	76.6	77.3	77.7	77.9
Healthy life years at birth for females	63.5	63.5	64.3	59.9	60.1	60.2	59.0	58.9	57.5	59.0	57.2	62.0	62.1	61.5	63.3
Healthy life years at birth for males	65.4	65.2	66.1	62.5	61.7	61.3	64.0	63.5	61.4	63.3	61.1	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	32.0	31.6	31.3	32.7	32.6	34.1	34.6	36.2	34.7	35.3	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	8.2	8.0	5.8	5.4	5.5	6.2	5.8	5.7	5.5	7.3	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	123	196	268	340	346	353	383	389	396	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	499	539	580	621	632	645	544	552	561	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	3.8	4.5	5.1	5.8	5.9	6.0	5.5	5.6	5.7	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	3,500	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	300	300	296	303	297	289	288	260	252	240	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.20.2: Statistical Annex - continued – Netherlands

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	17.0	17.5	18.4	19.1	19.2	19.3	19.6	15%	2%
Dependency									
Number of dependents in millions	1.16	1.21	1.41	1.53	1.62	1.63	1.64	42%	25%
Share of dependents, in %	6.8	6.9	7.7	8.0	8.4	8.4	8.4	24%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	3.5	3.7	4.4	5.3	5.8	6.0	6.0	69%	73%
AWG risk scenario	3.5	3.7	4.7	5.9	6.8	7.5	8.3	134%	170%
Coverage									
Number of people receiving care in an institution	302,600	323,061	405,482	493,287	558,504	583,530	581,921	92%	72%
Number of people receiving care at home	520,886	559,734	709,656	825,104	896,694	898,625	916,233	76%	86%
Number of people receiving cash benefits	0	0	0	0	0	0	0	:	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	4.8	5.1	6.0	6.9	7.6	7.7	7.7	59%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	71.2	72.8	79.0	86.0	89.8	90.8	91.3	28%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	92.7	92.8	93.0	93.4	93.6	93.8	93.7	1%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	7.3	7.2	7.0	6.6	6.4	6.2	6.3	-13%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	185.0	183.8	187.7	191.8	187.7	185.5	188.8	2%	10%
Unit costs of home care per recipient, as % of GDP per capita	8.4	8.2	8.0	8.1	8.0	8.0	8.0	-4%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	:	:	:	:	:	:	:	:	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.21. POLAND

General context: Expenditure, fiscal sustainability and demographic trends

In 2015, GDP per capita (18,500 PPS) in Poland was below the EU level of 29,600 PPS. In 2016, the population was estimated at 38 million and is projected to decrease to 31 million until 2070.

Health status

In 2015, life expectancy at birth was 81.6 years for women and 73.5 years for men, below the EU averages (EU: 83.3 for women and 77.9 for men). However, in 2015 healthy life years were at the EU average for women (63.2 vs. 63.3 years), but below the EU average for men (60.1 vs. 62.6 years). The percentage of the Polish population having a long-standing illness or health problem is slightly higher than in the EU (35.8% in Poland versus 34.2% in the EU). The percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 7.4%, which is lower than the EU average (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 2.55 million residents living with strong limitations due to health problems in 2016, an increase of 30% is envisaged until 2070 to more than 3.3 million. This applies to the "AWG reference scenario" of the 2018 Ageing Report, which assumes that half of the projected gains in life expectancy are spent without disability. That is a steeper increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group and an increase of 60% is projected (from 6.7% to 10.7%). This is considerably above the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term care expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors

is a projected increase in spending of about 0.8 pps of GDP by 2070⁽⁵⁵³⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 1.6 pps of GDP by 2070. This reflects that coverage and unit costs of care are comparatively low in Poland, and may experience an upward trend in future, driven by demand side factors.

There are no short-term fiscal sustainability risks and the medium-term risks are low. Over the long run, however Poland does face medium risks to fiscal sustainability. These risks are largely due to an unfavourable initial budgetary position, but also to the necessity to meet future increases in ageing costs (notably healthcare and long-term care)⁽⁵⁵⁴⁾.

System Characteristics

There is no explicit and separate LTC insurance scheme in Poland. Long-term care is very fragmented and governed by several laws relating to healthcare, social care, family benefits (nursing benefits and nursing allowance), pensions and rehabilitation. The coverage by formal LTC is low, and traditionally, LTC in Poland is provided by family members at home. LTC is financed by both the public and private stakeholders. There are co-payments on formal care, and the large provision of care is delivered informally by family members, and as such are privately financed.

Polish legislation includes two kinds of separate LTC benefits: cash benefits and in-kind benefits. Institutional care in Poland is split between the health sector (financed by the National Health Fund) and social assistance sector (financed indirectly by the Ministry of Family, Labour and Social Policy). The range of health benefits available to a patient in need of care is contained in the provisions of the regulation of the Ministry of Health on the guaranteed benefits (under the general health insurance), which determines the

⁽⁵⁵³⁾ The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁵⁵⁴⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

list and the terms of the guaranteed benefits of the above range.

Total public spending on LTC⁽⁵⁵⁵⁾ reached 0.5% of GDP in 2016 in Poland, well below the average EU level of 1.2% of GDP. Nearly 70% of the benefits were in-kind, while 30% were cash benefits in 2016 (EU: 84% vs. 16%). Thus, Poland seems to have above average usage of cash benefits.

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 73.5% higher in Poland. However, overall only 8.2% of these dependents receive formal in-kind LTC services, while the remainder 91.8% receive a relatively low amount of cash benefits. Overall, 4.9% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 82.1% of public in-kind expenditure (EU: 66.3%), 17.9% being spent for LTC services provided at home (EU: 33.7%). Thus, relative to other Member States Poland has a focus on institutional care (within formal care), which may not be surprising regarding the fact that overall little formal care is provided.

Types of care

Both cash benefits and in-kind benefits are available. Cash benefits include, apart from social assistance benefits which may also be awarded to persons in need of long-term care in difficult situations: medical care supplement and medical care allowance. Three types of care are provided: home care, semi-residential care and residential care. Home care includes in-kind nursing and social services as well as cash benefits. Semi-residential care is provided in day care and support centres. Residential care is provided via the "social

assistance house", care and treatment facilities, nursing and care facilities.

Eligibility criteria and user choices: dependency, care needs, income

In the health sector eligibility is defined by severity of needs measured on a "Barthel scale" of disability. In the social assistance sector, and according to the Act on social assistance, the provided care services are granted on the basis of a special individual needs evaluation (including age, level of illness or disability). If the recipient of care requires all day care, which cannot be provided at home, then that person is entitled to a place in the social assistance house. The income situation of the patient, however, is taken into account to determine the payment for care services and charge for staying in the social assistance house. The eligibility for other in-kind benefits which are provided within the social assistance is defined by an income-test. Nursing care for people treated in residential homes is provided as a part of general costs of stay. There are co-payments for this kind of services, residents cover 70% of the accommodation costs, except for people with the lowest income (in this case co-payment is shared with the municipality).

Persons requiring long-term care are also entitled to long-term care in home settings and institutional long term care. The Ministry of Health regulates access to guaranteed benefits in this field. In accordance with the regulations, a patient, who in the "Barthel scale" received 40 points or less, shall be awarded general health services within the institutional or home-based long term care. Patients cared for in institutional settings are financed by the National Health Fund. For institutional care there is also co-payment in place, with the patients' coverage of the accommodation costs set at 70%.

A nursing allowance is given to entitled recipients as a supplement to an old-age, disability or survivors' pension at the age of 75 or more, as well as to recipients of any age entitled to an old-age, disability or survivors' pension being incapable to do paid work and requiring assistance in daily activities. All in-kind benefits require a co-payment by the patient. A medical care allowance is given to recipients fulfilling specific health and age criteria, independent of family income. These

⁽⁵⁵⁵⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

are children up to the age of 16 requiring permanent assistance from another person and children older than 16 years with a moderate degree (level) of disability that began at the age of entitlement to the family allowance, or disabled persons with severe degree (level) of disability, without age criteria, and persons aged 75 or more.

Recently legislated and/or planned policy reforms

Since 2012, there have not been any significant reforms in the field of LTC within social assistance. Minor changes referred to the standardisation of certain services, which regulate rehabilitation activities and others. However, income criteria were verified in 2018 (verification is done every three years) as well as the amount of cash benefits from social assistance. As a result, increased income criteria were established: for a single person – 701 PLN (increase by 67 PLN; 10.5% in comparison to the previous criteria established in 2015); for one person in a family – 528 PLN (increase by 14 PLN; 2.7%). The regulation came into force on July 11, 2018. Income criteria form the basis of social assistance benefits, the amount of payment for care services and payment for staying in residential care homes.

Planned reforms in the field of LTC include among others the further standardisation of services, support for the development of services and the creation of daily care residential homes for the elderly and dependent in local environments, reconstruction of institutional care buildings, including modifying the method of payment for staying in residential care homes. In 2017, 130,300 persons benefited from social assistance benefits, whereas the number of people benefiting from residential care homes equalled 109,200.

Moreover, several government resolutions were passed in the 2013-2015 period related to "elderly people policy". Among others, these include:

The Cabinet Resolution No 237 from December 2013 on establishing The Governmental Programme for Social Activity of Elderly People in 2014-2020: the aim of the Programme for Social Activity of Elderly People (The ASOS Programme) is to improve the quality and level of living of elderly people to allow ageing with dignity through social activity. It is planned that

the State budget will spend 280 mln PLN (appx. €55.4 mln) in total on this Programme during the 2014-2020 period.

The Cabinet Resolution No 238 from December 2013 on accepting the Assumptions of the Long-Term Elderly People Policy in Poland in 2014-2020: this resolution fulfils the commitment stated in the Governmental Programme for Social Activity of Elderly People in 2012-2013 (The ASOS Programme). The ASOS Programme is the first nation-wide programme prepared on such a large scale, designed for elderly people and cross generational cooperation. A draft document on "Social policy towards the elderly people 2030: safety, participation, solidarity" was presented in September 2018. It constitutes an element of the Strategy for Responsible Development and will replace the above mentioned resolution of the Council of Ministers.

The Cabinet Resolution No 34 from March 2015 on establishing a multi-year programme "Senior-WIGOR" in 2015-2020: the strategic aim of the programme is supporting elderly people through subsidising the activities of the local government units intended to develop networks of Day Care Centres "Senior-WIGOR". Special focus of the programme is on local government units which have low income or high share of elderly people in the total population or have no infrastructure of social services for providing care services for the elderly outside their home. In 2016, the name of the programme and the networks were changed from "Senior-WIGOR" to "Senior +", the total amount for the period 2015-2020 allocated from the budget to this programme was changed from 370 million PLN to 340 million PLN.

Challenges

Poland has a relatively fragmented system of LTC, with low coverage and a large provision of informal care that is privately financed. The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities with respect to the provision of long-term care services; to set the public and private financing mix and organise formal workforce supply to

- face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to face the increased LTC costs in the future e.g. by tax-broadening, which means financing beyond revenues earned by the working-age population; to foster pre-funding elements, which implies setting aside some funds to pay for future obligations; to explore the potential of private LTC insurance as a supplementary financing tool.
 - **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage; to reduce the risk of impoverishment of recipients and informal carers.
 - *Encouraging home care:* to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care.
 - *Ensuring availability of formal carers:* to determine current and future needs for qualified human resources and facilities for long-term care.
 - **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
 - **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
 - **To facilitate appropriate utilisation across health and long-term care:** to steer LTC users towards appropriate settings.
 - **Improving value for money:** to invest in ICT as an important source of information, care management and coordination.
 - **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.21.1: Statistical Annex – Poland

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	246	275	314	366	317	362	380	389	395	411	430	12,451	13,213	13,559	14,447
GDP per capita, PPS	13.7	14.2	15.2	15.3	14.8	15.9	16.5	16.8	16.9	17.5	18.5	26.8	28.1	28.0	29.6
Population, in millions	38.2	38.2	38.1	38.1	38.1	38.0	38.1	38.1	38.1	38.0	38.0	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	69.8	70.1	78.3	264.1	283.2	352.1	373.6
As % of total government expenditure	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.0	0.8	0.8	0.9	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	79.3	79.7	79.8	80.0	80.1	80.7	81.1	81.1	81.2	81.7	81.6	82.6	83.1	83.3	83.3
Life expectancy at birth for males	70.8	70.9	71.0	71.3	71.5	72.2	72.5	72.6	73.0	73.7	73.5	76.6	77.3	77.7	77.9
Healthy life years at birth for females	66.9	62.9	61.5	63.0	62.5	62.3	63.3	62.8	62.7	62.7	63.2	62.0	62.1	61.5	63.3
Healthy life years at birth for males	61.2	58.4	57.6	58.6	58.3	58.5	59.1	59.1	59.2	59.8	60.1	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	32.6	32.1	30.9	32.8	33.6	34.1	34.5	34.1	34.0	35.8	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	6.3	6.9	6.6	7.4	7.9	7.3	7.5	8.1	7.6	7.4	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	46	73	100	127	130	133	86	88	90	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	5	18	32	45	46	46	118	121	123	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.1	0.2	0.3	0.5	0.5	0.5	0.5	0.5	0.6	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	1,214	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.21.2: Statistical Annex - continued – Poland

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	38.0	37.9	37.2	35.8	34.3	32.8	30.9	-19%	2%
Dependency									
Number of dependents in millions	2.55	2.65	2.95	3.23	3.26	3.32	3.30	30%	25%
Share of dependents, in %	6.7	7.0	7.9	9.0	9.5	10.1	10.7	60%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.5	0.5	0.7	0.9	1.0	1.2	1.3	166%	73%
AWG risk scenario	0.5	0.5	0.7	1.0	1.3	1.6	2.1	330%	170%
Coverage									
Number of people receiving care in an institution	86,288	93,727	112,806	138,530	150,476	159,361	172,431	100%	72%
Number of people receiving care at home	121,737	131,992	159,198	194,922	212,348	225,719	244,929	101%	86%
Number of people receiving cash benefits	1,665,190	1,760,265	2,015,419	2,346,351	2,505,151	2,607,693	2,799,789	68%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	4.9	5.2	6.2	7.5	8.4	9.1	10.4	111%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	73.5	74.9	77.6	83.1	88.1	90.2	97.4	32%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	56.0	56.7	59.2	63.4	66.2	67.9	69.8	25%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	44.0	43.3	40.8	36.6	33.8	32.1	30.2	-31%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	82.1	82.4	82.8	83.6	83.7	83.9	84.3	3%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	17.9	17.6	17.2	16.4	16.3	16.1	15.7	-12%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	100.3	100.4	108.1	117.9	127.7	135.5	139.1	39%	10%
Unit costs of home care per recipient, as % of GDP per capita	15.5	15.3	15.9	16.4	17.6	18.4	18.2	18%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	5.0	5.0	5.0	4.8	4.7	4.7	4.4	-12%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.22. PORTUGAL

General context of long-term care system: Expenditure, fiscal sustainability

In 2015, Portugal's GDP was around €180 bn or 21,400 PPS per capita, below the EU average GDP per capita of €29,600. The population of Portugal is estimated to be around 10 million inhabitants in 2016. Over the coming decades it is projected to fall gradually to 8.0 by 2070. This decrease of 23% contrasts with the expected increase of 2% for the EU as a whole.

Health status

Life expectancy at birth for men and women was, in 2015, respectively 78.1 years and 84.3 years, close to the EU average (77.9 and 83.3 years respectively). In 2015 the healthy life years at birth were 55 years (women) and 58.2 years (men) below the EU-average (63.3 and 62.6 respectively). At the same time, the percentage of the Portuguese population having a long-standing illness or health problem is higher than in the Union as a whole (42.7% and 34.1% respectively in 2015). The percentage of the population indicating a self-perceived severe limitation in its daily activities was in 2015 9.4%, far above the EU-average (8.1%).

Dependency trends

The share of dependents in Portugal is set to increase from 8.3% in 2016 to 11.5% of the total population in 2070, an increase of 38%. This is well above the EU-average increase of 21%. From 0.86 million residents living with strong limitations due to health problems in 2016, an increase of 7% is envisaged until 2070 to 0.92 million.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care (LTC) as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.9 pps

of GDP by 2070⁽⁵⁵⁶⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.6 pps of GDP by 2070.

Portugal faces low fiscal sustainability risks in the short run. Nonetheless, there are some indications that the fiscal side of the economy poses potential short-term challenges.

Risks appear, on the contrary, to be high in the medium term from a debt sustainability analysis perspective due to the still high stock of debt at the end of projections (2028). In contrast, in the long term, Portugal appears to face medium fiscal sustainability risks⁽⁵⁵⁷⁾.

System Characteristics⁽⁵⁵⁸⁾

Public long-term care is provided through residential structures for elderly (ERPI - *Estrutura Residencial para Pessoas Idosas*) and Long-term Care National Network (RNCCI - "*Rede Nacional de Cuidados Continuados Integrados*").

The ERPI were designed to provide temporary or permanent accommodation for persons at retirement age, without autonomy and without need of continuous access to nursing and medical care, therefore promoting a healthy ageing and higher quality of life.

The ERPI is managed by the Ministry of Labour, Solidarity and Social Security and is financed by budget transfers and a monthly user co-payment determined by a percentage of the per capita household income, variable between 75% to 90%, according to the user dependency degree.

The following table shows the number of agreements and users of ERPI in December 2017:

⁽⁵⁵⁶⁾ The 2018 Ageing Report : https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁵⁵⁷⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁵⁵⁸⁾ This section draws on OECD (2011b) and ASISP (2014).

Table 2.22.1: Number of agreements and users by degree of dependency

No. total of agreements	1623
No. total of users	59151
No. agreements for users with 2nd degree of dependency	713
No. users with 2nd degree of dependency identified on agreements for users with 2nd degree of dependency	3486
No. agreements exclusively for users with 2nd degree of dependency (1 agreement for Alzheimer's patients) for users with 2nd degree of dependency	40
No. users of agreements exclusively for users with 2nd degree of dependency (the agreements for Alzheimer's patients is for 30 users)	1573
No. agreements with positive discrimination and consequently with a higher funding	23
of which:	
for users with dependency of 20%	6
for users with dependency between 21% and 40%	3
for users with dependency between 41% and 60%	4
for users with dependency between 61% and 80%	6
for users with dependency higher than 80%	4
No. positive discrimination users identified on agreements for users with positive discrimination	817
of which:	
for users with dependency of 20%	208
for users with dependency between 21% and 40%	155
for users with dependency between 41% and 60%	98
for users with dependency between 61% and 80%	223
for users with dependency higher than 80%	133

Source: Portugal Ministry of Labour, Solidarity and Social Security.

The Long-term Care National Network (RNCCI - "Rede Nacional de Cuidados Continuados Integrados") was established in 2007. Its aim is to provide post-acute health care and social assistance for persons who are dependent (whether this is due to age and/or illness) who are referred to it by hospitals as well as health primary care units. It is under the coordinated jointly by the Ministries of Health and of Social Solidarity.

Since the beginning of RNCCI, monitoring reports are published twice a year including analysis of its structure, processes and outcomes. This is based on a mandatory minimal data set for all levels of the system.

Public spending on LTC ⁽⁵⁵⁹⁾ reached 0.5% of GDP in 2016 in Portugal, below the average EU level of 1.6% of GDP. 99.8% of the benefits were in-kind, while 0.2% were cash-benefits (EU: 84.4 vs 15.6%).

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC.

⁽⁵⁵⁹⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

This share is with 38.6% lower in Portugal. Overall, 3.2% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 13.4% of public in-kind expenditure (EU: 66.3%), 86.6% being spent for LTC services provided at home (EU: 33.7%).

Administrative organisation

As explained above, from 2007 onwards, the provision of both long-term health care and social assistance to dependent persons made vulnerable by age and/or disease has been fostered by the RNCCI and coordinated by Ministries of Health and of Labour, Solidarity and Social Security.

The RNCCI is responsible for monitoring both the health care provided by units within the network as well as the quality of their organisation. It has defined standards and measures of quality and audits them on a regular basis, in parallel with the assessment and review of recipient satisfaction and claims. Units and teams in the network are periodically evaluated by regional coordination teams. The RNCCI employs more than 3,000 professionals, coached through a comprehensive training plan. The five regions, through the Regional Coordinating Teams (ECR) in conjunction with the Local Coordination Teams (ECL), have the skills to ensure the criteria application relating to the referral of users to the Long Term Care National Network (RNCCI) circuit, ensuring continuous monitoring of providers to improve aspects related to its structure, process and results, to consolidate good practices, obtain autonomy gains and guarantee continuity of care beyond the permanence in the network, sharing information with other health and social services and discharge support.

In complying with the "Strategy for Quality" set by RNCCI, some actions have been progressively implemented in order to improve the system. Thus, it is important to have periodic monitoring visits conducted by the ECL provision units, in which

the parameters, contained in the consensual follow-up grids, agreed between the Health Ministry and the Social Security, are checked. These grids are related with the definitions of values, goals and key factors, as well as the assessment of compliance with the agreements and the appropriate use of the resources units. It is a battery of measurable items from which it is possible to develop a plan of ECL feasible recommendations. One of the main constraints pointed out, regarding the organisation of these teams, relates to the fact that the elements of ECL perform functions other than those assigned to RNCCI, both in of Health and Social Security. The population covered by the ECL can be different according to the different regions. The ECL are present in all Health Center Groupings (ACES) and in some cases they also exist in some extensions of these groupings.

Considering the importance that training plays in developing the skills of professionals, RNCCI has developed, since the beginning of the network, several training events regarding coordination, monitorisation, referral and care. Thus, there were several training courses organised by the Regional Health Authorities, Social Security Institute and District Centres. The training provided, with different pedagogical approaches, covered 18,853 graduates and totalled 10,335 hours of training, according to the following table.

Table 2.22.2: Number of training courses, hours and graduates per year

	Training courses	Training hours	Graduates
2007	75	345	3312
2008	246	1752	1842
2009	110	908	2756
2010	138	1208	2331
2011	141	2238	2404
2012	67	1475	1443
2013	38	543	1075
2014	51	951	1113
2015	24	328	871
2016	21	380	729
2017	20	207	977
Total	931	10,335	18,853

Source: Portugal Ministry of Health.

The decrease in training hours since 2011 relates to certain management constraints by the financing

entity who delayed the implementation of training for subsequent years. On the other hand, the need to invest in some training areas, including coordination and functioning of the network, decreased, due to the network consolidation and also due to financial restrains and limitations in human resources influence the dynamics of the courses.

Training carried out the following themes, among others: Skills and strategies in the development of RNCCI; Work Methodologies in LTC; Organisation and operation of the RNCCI units/teams; Bioethics; Training professionals in inpatient reference units; Implementation of the Status of Resources Law in RNCCI; Continuous Improvement in LTC; Quality evaluation and auditing; Dementia in LTC; Assessment and intervention in situations of elderly violence and mistreatment; Palliative Care: Basic course of Palliative Care, Intervention in Grief and Loss; Respect for Human Dignity in RNCCI; Chronic Pain; Geriatrics and Gerontology; Clinical Training in geriatric syndromes, treatment of wounds / pressure ulcers, compression therapy and non-invasive ventilation; Clinical Risk Management in LTC; Prevention and Control of Infection in LTC; Individual Intervention Plan; Nutritional intervention in LTC; Implementation of International Classification of Functionality (ICF); Diabetes in LTC.

Types of care

RNCCI offers a range of formal care on the basis of diversified coordinated interventions that take place in different types of RNCCI units.

For adults it provides convalescence care, post-acute rehabilitation services, medium and long-term care and home care. Palliative care moved to an autonomous network of care since 2017.

In 2016, Paediatric Integrated care was implemented, institutional (Integrated paediatric care unit Level 1- UCIP N1) and ambulatory care (Paediatric Ambulatory care – UAP).

In 2017 began pilot-experiments of Mental Health long-term care, consisting of inpatient units, ambulatory care and home care. The different types of care in this area are shown in the table below.

Table 2.22.3: RNCCI Mental Health – Pilot-experiments

RA	Autonomous Home (Residência Autónoma)
RAMa	Home with maximum support (Residência de Apoio Máximo Adultos)
RAMo	Home with medium support (Residência de Apoio Moderado)
RTA	Home with developing training autonomy (Residência de Treino de Autonomia)
RTA/A	Home with developing training autonomy - childhood and youth (Residência de Treino de Autonomia - Tipo A infância e adolescência)
USO	Occupational health unit (Unidade Sócio Ocupacional)
USO/IA	Occupational health unit - childhood and youth (Unidade Sócio Ocupacional - Infância e Adolescência)
EAD	Home care teams (Equipa de Apoio Domiciliário)

Source: Portugal Ministry of Health

The network operates according to a purchaser/provider split. The portfolio of institutional care services within RNCCI by typology is shown in Table 2.22.4, where it can be seen that long and medium term care are largely the predominant types of care.

Table 2.22.4: Portfolio of institutional long-term care services end of 2018

Type of service		Number of places 31-12-2018
Adults	Convalescence care	935
	Medium term and Rehabilitation care	2674
	Long term and maintenance care	4794
Integrated Pediatric Care (RNCCI-CP)	Integrated pediatric care level 1 (UCP N1)	10
Mental Health Integrated Care (RNCCI SM)	RA - Autonomous Residence	27
	RAMa - Adults Maximum support residence	48
	RAMo - Adults Moderate support residence	28
	RTA - Adults Autonomy training residence	19
	RTA-A - Pediatric Autonomy training residence	18
Total		8553

Source: Portugal Ministry of Health.

Compared to 2017, the number of medical inpatients facilities grew 5%, up to a total of 8,553, without palliative care. This growth is explained by the increase in the type of the Convalesce Care, Medium term and rehabilitation care (UMDR – Unidade Média Duração e Reabilitação) and long duration and maintenance units (ULDM – Unidade de Longa Duração e Manutenção) and Mental Health. Currently ULDM beds represent 56% of the beds available for admission. Institutional care services within RNCCI are provided by a range of agents: non-profit organisations (75.7% of the bed supply), private health and residential care facilities, SNS public hospitals and other health care units as shown on Table 2.22.5. All must act within common technical standards and their services are subsidised by the state.

Table 2.22.5: Providers of institutional long-term care

Entities	31-12-2017		31-12-2018		Variation	
	Nº of agreements	Nº of beds	Nº of agreements	Nº of beds	Agreements	Beds
National Health Service (SNS)	7	190	9	219	28.6%	15.3%
Charities (IPSS)	SCM	3 985	183	4 112	1.7%	3.2%
	Other	90	2 186	92	2 267	2.2%
TOTAL IPSS	270	6 171	275	6 379	1.9%	3.4%
Private sector	60	1 721	63	1 825	5.0%	6.0%
TOTAL	337	8 082	347	8 423	3.0%	4.2%

Source: Portugal Ministry of Health.

In 2018, the development of medical inpatient responses in RNCCI, including Paediatric care (inpatient and ambulatory care), based on services hired with Private Institutions of Social Solidarity (IPSS – Instituições Privadas de Solidariedade Social), represents 79% of all agreements, representing the hiring of 6,379 vacancies, about 76% of supply. Within the private institutions of social solidarity (IPSS), the Holy Houses of Mercy (SCM - Santas Casas da Misericórdia) represent 53% of all agreements, with 4,112 contracted vacancies, representing about 49% of the total.

The development of medical inpatient responses in Mental Health Integrated Care (RNCCI SM), until now are based on services hired with Private Institutions of Social Solidarity (IPSS – Instituições Privadas de Solidariedade Social).

Table 2.22.5a: Providers of institutional long term care – Mental health care

Entities	31-12-2017		31-12-2018		Variation		
	Nº of agreements	Vacancies	Nº of agreements	Vacancies	Agreements	Vacancies	
Charities (IPSS)	SCM	0	0	1	24	-	-
	OUTRAS	16	189	20	255	25%	34.9%
TOTAL IPSS	16	189	21	279	31%	47.6%	

Source: Portugal Ministry of Health.

Within the private institutions of social solidarity (IPSS), the Holy Houses of Mercy (SCM - Santas Casas da Misericórdia) represent 5% of all agreements on Mental health care (covering beds, ambulatory and home care) and 8.6% of the vacancies (0.6% of total contracted vacancies with this type of institution). Other charity institutions represent 95% of all agreements, with 255 contracted vacancies (beds, ambulatory and home care) representing about 91.4% of the total (see Table 2.22.5a).

In hospitals, specialised teams (EGA – Equipas de Gestão de Altas) prepare patient discharge by referral to other settings.

Home Long-Term Care Multidisciplinary Teams (ECCI - Equipas de Cuidados Continuados Integrados) provide local primary health care and social support to patients not requiring a stay in institutions, and are coordinated by “community care” units (UCC – Unidade de Cuidados Continuados) within the local health organisations (ACES - Agrupamentos de Centros de Saúde). Long-term Care at home is provided by ECCI.

Referral routes are defined at a central level in order to enable interdisciplinary teams to operate consistently at regional and local level in referring patients in according to the capacity of the local network as well as with the personal and therapeutic profiles of recipients. Most EGA (86%) were built in the pilot phase (2006-2007), being noted as one of the key factors that contributed to the success of RNCCI. Now all hospitals have EGA. Since hospitals have been aggregated in Hospital Centers (CH – Centros Hospitalares) and Local Health Units (ULS – Unidades Locais de Saúde), the number of EGA are being adjusted to this reorganisation, but exist in all hospitals.

The reform of primary health care initiated the implementation of Health Centers referring teams, thus constituting a benchmark circuit, and now all Health Centers have referring teams.

Table 2.22.6: Number of ECCI and vacancies in 2018

Region	Nº ECCI	Vacancies
North	92	1606
Center	68	727
Lisbon and Tagus Valley (LVT)	59	2092
Alentejo	37	553
Algarve	26	750
TOTAL	282	5728

Source: Portugal Ministry of Health.

The number of vacancies as shown on Table 2.22.6 depends on human resource allocation to the ECCI. The total number of vacancies in RNCCI (Home Care, and inpatient units related to adults) at the end of 2018 were 14,131 (without Palliative care), representing 729 places per 100.000 inhabitants with equal or more than 65 years, shown in table.

Table 2.22.7: Total number of vacancies in Adults RNCCI (Home Care and inpatient units) end of 2018

Region	Inhabitants aged ≥ 65 years	Nº Beds	Nº Beds/100,000 Inhabitants aged ≥ 65 years	Nº Vacancies Home Care	Nº Vacancies Home Care/ 100,000 Inhabitants aged ≥ 65 years	Total Vacancies	Total Vacancies/10*6 Inhabitants aged ≥ 65 years
North	631 439	2 635	417	1 606	254	4 241	672
Center	393 338	2 321	590	727	185	3 048	775
Lisbon and Tagus Valley (LVT)	696 615	2 114	303	2 092	300	4 206	604
Alentejo	128 427	804	626	553	431	1 357	1 057
Algarve	87 789	529	603	750	85	1 279	1 457
TOTAL	1 937 788	8 403	434	5 728	296	14 131	729

Source: Portugal Ministry of Health.

The total places of home care, ambulatory and inpatient units, in the three areas of RNCCI – adults, Integrated Paediatric care and Mental Health integrated care was 14,430. "Home Long Term Care Multidisciplinary Teams" were created in 2009, through the reform of primary health care. These teams depend directly from ACES.

Eligibility criteria: dependency, care needs, income

Long-term benefits are means-tested. Although there is an assessment of need, there is no minimum dependency criterion above which long-term care is provided.

Co-payments, out of the pocket expenses and private insurance

The financial responsibilities of the public sector are shared between the Ministry of Health and the Ministry of Labour, Solidarity and Social Security. The cost-sharing required by the Long-term Care National Network is determined by the government (Decree Law No. 101/2006, 6 June 2006, Article 12) and co-financed by both the health and social security sectors (Portaria No. 994/2006, 19 September 2006) according to the type of service. Thus, the Ministry of Health finances the costs of health care provision, while care recipients make co-payments for the social care received. The care recipient will have to contribute a co-payment according to the individual's or his/her family's income (see Despacho Normativo No. 34/2007, which specifies the conditions for which social security will pay and the amount).

From the beginning, the RNCCI is the first response with full implementation of the financing model based on family differentiation by social security. The family differentiation financing, which involves the attribution of a contribution to

the user depending on the income of the household, has allowed greater equity and social fairness.

In 2018, the amount per day defined as the cost with social support for care of medium duration and rehabilitation units (UMDR – Unidade de Média Duração e Reabilitação) was EUR19.93 and for the long duration and maintenance units (ULDM – Unidade de Longa Duração e Manutenção) was EUR30.52. Monitoring and follow-up made showed that on average, in 2017, the contribution of social security was EUR10.79 per day of hospitalisation by patient in UMDR and EUR15.41 in ULDM, i.e. 54.47 % and 50.79%, respectively, of the cost was paid by social security⁽⁵⁶⁰⁾.

Prevention and rehabilitation policies/measures

Prevention and rehabilitation are performed by the health care system.

Recently legislated and/or planned policy reforms

Implementation of a contracting process

A working group was created (Ministerial Order No. 1981/2014 of 7 February) with the purpose of presenting a national strategy which contributes to the achievement of excellence levels in the response that is given to users. This strategy should encourage the adoption of procedures that contribute to improved levels of quality of care provide and to foster a culture of commitment, responsibility and assessment of results in the RNCCI. The implementation of contracting processes with the LTC providers should allow to match the adequacy of care to the needs of people who are dependent and to foster the consolidation of the RNCCI, based on an expansion and sustainable development in financial terms and also consistent with its mission.

The working group presented a proposal with a set of measures on the implementation of the contracting process with the RNCCI LTC providers; study the different methods of payment applied to LTC; propose initiatives that promote

improved quality of care in RNCCI and enhance the gains for users, and; promote the participation of various actors.

Strengthening the outpatient component

There is commitment to push forward the outpatient component of RNCCI through the implementation of "Day and Promotion of Autonomy Units" (UDPA - Unidades de Dia e de Promoção da Autonomia) and strengthen of "Home Long Term Care Multidisciplinary Teams" (ECCI), making them effective, as opposed to institutionalisation of patients as recommended internationally. Therefore, it is planned to return to the underlying intervention principles of the ECCI creation, i.e. focusing on the integration dimension / joint health and social support, which will enable complementarity with a more effective inpatient response as the already existing ones, namely UMDR and ULDM, as well as promoting higher mobility of users in the case of discharge preparations, and ensuring continuity of care.

Regarding UDPA, these units may contribute to maintaining at home and at their usual environment people who are currently referred to other types of network. These units can also have a quality response to the needs of the population, if they are directed towards to a more specialised support in the area of dementia. This is an issue of proximity, so its implementation should be based on knowledge of the territory, accessibility, issues of economic and preferences of patients and family.

Quality and continuous improvement

On the one hand, a national project to encourage quality, that ensures the specific regional characteristics, is useful, using common indicators and methodologies as a way that will increase the understanding of the reality of LTC, introducing benchmarking techniques, and developing measures of continuous improvement, among others. On the other hand, evaluation and monitoring of quality parameters is useful as it provides information to users and family, allowing putting into practice the principle of preference and also the informed choice principle, as well as the development of strategies concerning the rights of long term care users.

⁽⁵⁶⁰⁾ ISS, IP data.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** To establish a coherent and integrated legal and governance framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of RNCCI services and its financing; To establish good information platforms; To use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; To share data between government administrations; To improve administrative efficiency; To deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** To face the increased RNCCI costs in the future e.g. by tax-broadening, which means financing beyond revenues earned by the working-age population; To foster pre-funding elements, which implies setting aside some funds to pay for future obligations; To explore the potential of private RNCCI insurance as a supplementary financing tool; To determine the extent of user cost-sharing on RNCCI benefits.
- **Providing adequate levels of care to those in need of care:** To adapt and improve RNCCI coverage schemes, setting the need-level triggering entitlement to coverage; the breadth of coverage, that is, setting the extent of user cost-sharing on RNCCI benefits; and the depth of coverage, that is, setting the types of services included into the coverage; To reduce the risk of impoverishment of recipients and informal carers.
- **Further encouraging independent living:** To continue providing effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care; To seek options to increase the productivity of LTC workers.
- **Supporting family carers:** To establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** Establish better co-ordination of care pathways and along the care continuum; To facilitate appropriate utilisation across health and long-term care; To arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for RNCCI; To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; To steer RNCCI users towards appropriate settings.
- **Changing payment incentives for providers:** To consider fee-for-service to pay RNCCI workers in home-care settings and capitation payments; To consider a focused use of budgets negotiated ex-ante or based on a prefixed share of high-need users.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; To invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; To employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.22.1: Statistical Annex – Portugal

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	159	166	175	179	175	180	176	168	170	173	180	12,451	13,213	13,559	14,447
GDP per capita, PPS	21.3	21.8	21.9	21.4	20.3	20.9	20.3	20.1	20.2	20.7	21.4	26.8	28.1	28.0	29.6
Population, in millions	10.5	10.5	10.5	10.6	10.6	10.6	10.6	10.5	10.5	10.4	10.4	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	1.1	1.2	1.2	1.2
Per capita PPS	11.4	12.5	14.0	18.2	21.7	24.4	27.7	31.1	32.2	35.1	36.9	264.1	283.2	352.1	373.6
As % of total government expenditure	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	81.5	82.5	82.5	82.7	82.8	83.2	83.8	83.6	84.0	84.4	84.3	82.6	83.1	83.3	83.3
Life expectancy at birth for males	74.9	75.5	75.9	76.2	76.5	76.8	77.3	77.3	77.6	78.0	78.1	76.6	77.3	77.7	77.9
Healthy life years at birth for females	57.1	57.9	57.9	57.6	56.4	56.7	58.6	62.6	62.2	55.4	55.0	62.0	62.1	61.5	63.3
Healthy life years at birth for males	58.6	60.0	58.5	59.2	58.3	59.3	60.7	64.5	63.9	58.3	58.2	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	30.9	33.2	33.3	34.1	33.9	34.7	37.1	39.8	40.4	42.7	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	11.6	12.9	12.0	10.9	9.4	9.3	9.0	9.3	9.2	9.5	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	62	61	60	60	61	62	23	23	23	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	140	124	109	93	95	96	14	14	14	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.9	1.8	1.6	1.4	1.5	1.5	0.4	0.4	0.4	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	11	12	15	16	16	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.22.2: Statistical Annex - continued – Portugal

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	10.3	10.2	9.9	9.5	9.1	8.5	8.0	-23%	2%
Dependency									
Number of dependents in millions	0.86	0.89	0.96	1.01	1.03	1.00	0.92	7%	25%
Share of dependents, in %	8.3	8.7	9.7	10.6	11.3	11.7	11.5	38%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.5	0.6	0.7	0.9	1.2	1.4	1.4	159%	73%
AWG risk scenario	0.5	0.6	0.9	1.2	1.8	2.4	3.2	486%	170%
Coverage									
Number of people receiving care in an institution	33,227	35,572	41,242	47,579	52,891	55,197	52,417	58%	72%
Number of people receiving care at home	15,933	17,192	20,242	23,778	26,957	28,687	27,806	75%	86%
Number of people receiving cash benefits	283,732	298,223	332,628	375,752	415,273	436,055	417,302	47%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.2	3.4	4.0	4.7	5.4	6.1	6.2	93%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	38.6	39.4	41.2	44.2	48.0	52.1	54.0	40%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	99.8	99.8	99.8	99.8	99.8	99.8	99.8	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-16%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	13.4	13.3	13.1	12.9	12.7	12.5	12.2	-9%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	86.6	86.7	86.9	87.1	87.3	87.5	87.8	1%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	22.6	23.1	22.9	24.2	25.6	26.0	26.2	16%	10%
Unit costs of home care per recipient, as % of GDP per capita	304.1	310.8	308.9	325.9	345.0	351.5	354.0	16%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.23. ROMANIA

General context: Expenditure, fiscal sustainability and demographic trends

In 2015, GDP per capita (13,900 PPS) in Romania was one of the lowest in the EU and far below the EU average of 26,600 PPS. The population was estimated at 19.9 million in 2016 and is projected to decrease to 15.0 million until 2070.

Health status

Health outcomes in Romania are lagging behind EU standards. Life expectancy at birth is 71.5 years for men and 78.7 years for women, far below the EU averages (EU: 77.9 for men and 83.3 for women). Also healthy life years are below the EU averages for women (59.4 vs. 63.3 years), and for men (59 vs. 62.6 years). The percentage of the Romanian population having a self-reported long-standing illness or health problem is considerably lower than in the Union (20.1% in Romania versus 34.2% in the EU). The percentage of the population indicating a self-perceived severe limitation in daily activities stands at 6.8%, which is lower than the EU-average (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase over the coming 50 years. From 1.5 million residents living with strong limitations due to health problems in 2016, an increase of 10% is envisaged until 2070, to 1.7 million. That is a less steep increase than in the EU as a whole (25%). However, due to the population decline, when measured as a share of the population, the dependents are becoming a bigger group, from 7.8% to 11.2%, an increase of 44%. This is more than the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and by a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 0.9 pps

of GDP by 2070 ⁽⁵⁶¹⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.1 pps of GDP by 2070. This reflects the fact that coverage and unit costs of care are comparatively low in Romania, and may experience an upward trend in future, driven by demand side factors.

Medium fiscal sustainability risks appear for Romania over the long run. These risks derive primarily from the unfavourable initial budgetary position, compounded by age-related public spending ⁽⁵⁶²⁾.

System Characteristics

There is no explicit and separate long-term care insurance scheme in Romania. Long-term care is fragmented and governed by several laws relating to healthcare, social assistance, pensions and rehabilitation. In most cases, families take care of elderly and dependent people. Medical long-term care needs are covered mostly in the formal health care sector.

Most formal long-term care responsibilities are assumed by local authorities. Financing is provided via central and local resources. NGOs play an important role in the delivery of services. At the central level, financing is shared by the state budget and the National Health Insurance Fund (NHIF), with the latter providing resources for medical services. As from the second half of 2015, Romania has eliminated the restriction of social services to be provided by profit-making companies. Consequently, the potential of the private social service suppliers, related to the long term care of dependent elderly, is likely to increase. Out-of-pocket-payments complement public resources; their level is set by the local authorities.

Depending on the nature of the benefit provided, financing is ensured from the public pension

⁽⁵⁶¹⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁵⁶²⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

budget (pensions - only disability pensions), the NHIF (medical services), local budgets (home care), and the funds allocated from the state budget to the Ministry of Labour, Family, Social Protection and Aged Persons (MLFSPAP) (cash benefits and allowances).

Public spending on long-term care ⁽⁵⁶³⁾ was at the level of 0.3% of GDP in 2015, much below EU average of 1.2% of GDP. Virtually 100% of this expenditure was spent on in-kind benefits (EU: 80%), while close to zero spending was provided via cash-benefits (EU: 20%). This reflects the fact that, Romania does not use cash benefits.

The expenditure for institutional (in-kind) services makes up only 12% of public in-kind expenditure (EU: 61%). Thus, relative to other Member States, Romania has a very low focus on institutional care, which is basically reflecting the low coverage with formal institutional care benefits. However, a great deal of long-term care spending may not be accounted for as such, as it will be provided in acute care settings, thus being effectively registered as health care expenditure. In this case, there is need to shift long-term care patients out of acute care to long-term care service providers.

Types of care

According to Law 17/2000, which regulates the social care for elderly persons, long-term care for this category provides three types of community services: temporary or permanent home care; temporary or permanent care in a residential centre; and care in daily centres. Home care implies the provision of: household services (prevention of social marginalisation and supporting social reintegration, legal and administrative counselling, payment of certain household obligations, catering, etc.); socio-medical services (personal hygiene, socio-cultural activities, etc.); medical services (medical consultations, medicine administration, etc.).

According to the Social Assistance Law no. 292/2011, any dependent person is entitled to personal care services, provided according to

⁽⁵⁶³⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

his/her individual need of aid to accomplish the daily activities, to his/her family according to the socio-economic situation and to his/her personal life environment. Long-term care represents the personal care lasting more than 60 days. Beneficiaries of personal care are the elderly, the disabled and those suffering from chronic disease. Personal care services can be also organised and provided in an integrated form, together with medical care, rehabilitation and environment adaptation or other recovery services.

The home care services are presently financed from the National Health Insurance Fund, while the expenditures incurred with the social services of personal care are ensured from the local or central budget (in the form of cash benefit, payment of salaries for professional formal care givers, and/or financing subsidies for the services rendered by authorised providers), as well as from the contributions (out-of-pocket payments) made by the beneficiaries.

The long-term care of disabled persons is coordinated by the National Authority for the Protection of Persons with Disabilities, coordinated by the Ministry of Labour, Family, Social Protection and Aged Persons (MLFSPAP). Disabled persons are entitled to cash benefits (monthly disability indemnity, additional monthly personal budget, allowances and other indemnities and facilities) and in-kind services of social and medical nature. Two types of services are provided: primary, aimed at preventing the social exclusion, and specialised, to ameliorate the individual's physical and psychical capacities. Concretely, the services provided to disabled persons are the same as those delivered to aged people.

There are no cash benefits for informal care of elderly people, but only for persons who are officially recognised as having a disability. However, older persons who are chronically or terminally ill or have multiple comorbidities may be assessed as presenting a degree of disability. In this way, they can benefit from care allowances usually granted to a member of their family. The personal care involving aid for accomplishing the daily instrumental activities is provided by formal caregivers, only if no informal or volunteer caregivers are available.

Eligibility criteria and user choices: dependency, care needs, income

Benefits and services for the persons with disability are granted on the basis of a certificate attesting the disability, as follows: cash benefits and social services granted in home or in residential/day care centres. The person with a severe disability, according to its nature and to the specific care needs can be assisted at home by a family member or another person employed as a personal assistant. The recipient of care can also choose to receive a monthly cash benefit.

Local budgets can grant allowances to the spouse or a relative who takes care of a dependent older person, but this is subject to local initiative. If the carer is salaried and working part-time, she/he can apply for support equal to the remainder of the salary - equivalent of a gross monthly salary of a newly qualified social assistant with an intermediate level of training. In all cases, the allowance is granted on the basis of a means-tested assessment.

Prevention and rehabilitation measures

The Strategy for Social Inclusion of Persons with Disabilities 2014-2020 continues and further develops the approach initiated by the National Strategy for protection, integration and social inclusion of people with disabilities in the period 2006 – 2013.

The Strategy is related to the principles and obligations arising from the ratification of the UN Convention on the Rights of Persons with Disabilities. The UN Convention provides a framework for developing public policy and for the modernisation of practices, tools and methods to support the community, leading to a barrier-free participation of persons with disabilities in society, to a dignified and fulfilled life in the community.

The Strategy for Social Inclusion of Persons with Disabilities 2014-2020 is divided into nine main areas of reference: 1. accessibility; 2. participation; 3. equality; 4. quality community based services; 5. employment; 6. education and training; 7. social protection; 8. health; 9 international cooperation.

There is a medium-term (2016-2018) operational action plan, devised to fulfil the objectives

established by the National Strategy for Promoting the Active Ageing and the Protection of Elderly 2015-2020 and by the Strategic Action Plan 2015-2020. This project stipulates, among others, the establishment within the Ministry of Labour of a long-term care Directorate, responsible for the coordination, planning and settlement of all the LTC issues and for the joint development (together with the Ministry of Health) of a “Long-term Care Program”, which is meant to integrate all the benefits and services afferent to LTC, under a unified system.

By implementing the 2014-2020 National Strategy for Promoting Active Ageing funds were allocated under 2014-2020 EFRD and the State Budget in order to develop infrastructure for social home care services for elderly at risk of poverty or exposed to other types of vulnerability. Three projects amounting to €1.87 million (EFDR and the State Budget) have been contracted by March 2018.

Formal/informal caregiving

Most of dependent elderly people benefit from the care services provided inside the family.

Moreover, in order to prevent the institutionalisation of old dependants, the State Budget will finance two programmes delivered over two years that are dedicated to developing the public network of community household services and to strengthening the capacity of public social assistance services in some territorial administrative units. The first programme will support the implementation of the case management and the social proximity principle for about 1,000 old dependants. The second programme will provide assistance for about 1,000 local public administrative authorities in order to render operational support, manage and provide social services. It will also finance the employment of 1,000 social work assistants in territorial administrative units (villages) where the public social assistance service was not created/accredited.

Corruption

Corruption is present in many economic sectors and involves appointed and elected officials at all levels of government as well as civil servants and

employees of public institutions. This is borne out by the record of criminal investigations and convictions for corruption (⁵⁶⁴).

Preventing corruption in public administration was one of the key priorities of the 2012-2015 National Anti-corruption Strategy. The evaluation of the strategy shows some progress in putting in place corruption prevention measures at the level of national administration. It concludes, however, that local administration structures are severely lagging behind in terms of building up the necessary capacity to prevent corruption effectively. The government included additional measures in the renewed anticorruption strategy 2016-2020 to remedy the weaknesses identified in the evaluation.

Despite some progress, challenges remain regarding corruption in the LTC sector. Currently a major review is underway regarding medical reimbursements made to non-existent patients for home care services. The lack of transparency in medical reimbursements affects the budget and the quality of services provided to dependents.

Recently legislated and/or planned policy reforms

The National Health Strategy 2014-2020 outlines a specific objective on increasing access to quality services for rehabilitation, palliative and long-term care adapted to the demographic ageing phenomenon and epidemiological profile of morbidity:

1. Development of a National Plan for medium and long term on rehabilitation services, palliative care and long-term including a
 - review of the regulatory framework regarding the organisation, financing and delivery of long term;
 - hospital network reorganisation of chronic diseases and medical and social assistance;
 - classification of providing long-term care according to levels and types of care, with continued reduction for acute beds at more than 4.5 per 1,000 population in 2020;

- diversification of funding sources, including accessing funds repayable grants or by supporting private investment in the construction and equipping of facilities providing long-term care.

2. The implementation of the National Plan on rehabilitation services, palliative and long-term care:

- identification, reorganisation and rehabilitation of infrastructure at county / regional / national hospitals for chronic diseases, rehabilitation centres according to demographic and morbidity profile;
- increasing access to programs of continued medical education and training diversified and focused on development needs and the needs of patients served;
- development and implementation of standards of organisation and operation, practice guidelines and procedures "therapeutic pathway;
- developing mechanisms, standards or institutional work procedures that ensure an integrated and effective response on the rehabilitation of adults and children with disabilities.

Challenges

Romania has a relatively fragmented system of long-term care, with low coverage and a large provision of informal care that is privately financed. The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities concerning the provision of long-term care services; to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services, such opening the market for private providers of care services; to

(⁵⁶⁴) COM (2016) 41 final; SWD (2016) 16 final.

- strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to set guidelines to steer decision-making at local level or by practising providers; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to face the increased LTC costs in the future e.g. by tax-broadening, which means financing beyond revenues earned by the working-age population; To foster pre-funding elements, which implies setting aside some funds to pay for future obligations; To explore the potential of private LTC insurance as a supplementary financing tool.
 - **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage as stipulated in the actual legislation. To provide targeted benefits to those with highest LTC needs; to reduce the risk of impoverishment of recipients and informal carers
 - **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care; to improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers.
 - **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
 - **Ensuring coordination and continuity of care:** To establish better coordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
 - **To facilitate appropriate utilisation across health and long-term care:** To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; To steer LTC users towards appropriate settings.
 - **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
 - **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and to identify risk groups and detect morbidity patterns earlier.
 - **Corruption:** Tackle corruption in the LTC system.

Table 3.23.1: Statistical Annex – Romania

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	80	98	125	142	120	127	133	134	144	150	160	12,451	13,213	13,559	14,447
GDP per capita, PPS	13.2	14.0	14.2	14.2	13.0	13.0	13.1	13.2	13.0	13.3	13.9	26.8	28.1	28.0	29.6
Population, in millions	21.4	21.3	21.1	20.6	20.4	20.3	20.2	20.1	20.0	19.9	19.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.5	0.5	0.5	0.7	0.8	0.8	0.7	0.6	0.1	0.1	0.3	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	32.4	38.0	39.3	42.4	51.9	264.1	283.2	352.1	373.6
As % of total government expenditure	1.6	1.5	1.4	1.7	1.9	1.9	1.8	1.7	0.2	0.2	0.8	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	75.4	76.1	76.8	77.5	77.7	77.7	78.2	78.1	78.7	78.7	78.7	82.6	83.1	83.3	83.3
Life expectancy at birth for males	68.4	69.0	69.5	69.7	69.8	70.0	70.8	70.9	71.6	71.4	71.5	76.6	77.3	77.7	77.9
Healthy life years at birth for females	:	:	62.5	62.9	61.7	57.5	57.0	57.7	57.9	59.0	59.4	62.0	62.1	61.5	63.3
Healthy life years at birth for males	:	:	60.5	60.0	59.8	57.3	57.4	57.6	58.6	59.0	59.0	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	:	19.5	19.8	20.8	20.9	21.6	21.2	20.6	19.9	20.1	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	:	7.1	6.8	7.1	7.6	8.3	8.5	8.5	7.9	6.8	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	86	97	108	119	121	122	189	191	193	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	120	142	164	186	189	192	204	207	210	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.0	1.2	1.3	1.5	1.5	1.6	2.0	2.0	2.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.23.2: Statistical Annex - continued – Romania

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	19.7	19.2	18.0	17.0	16.3	15.7	15.0	-24%	2%
Dependency									
Number of dependents in millions	1.53	1.54	1.63	1.71	1.73	1.77	1.67	10%	25%
Share of dependents, in %	7.8	8.0	9.1	10.0	10.6	11.3	11.2	44%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.3	0.3	0.4	0.5	0.5	0.6	0.6	100%	73%
AWG risk scenario	0.3	0.3	0.5	0.8	1.4	2.5	4.6	1441%	170%
Coverage									
Number of people receiving care in an institution	222,768	228,246	244,363	269,034	280,064	298,727	291,485	31%	72%
Number of people receiving care at home	205,896	211,281	225,809	250,443	263,977	287,115	283,832	38%	86%
Number of people receiving cash benefits	0	0	0	0	0	0	0	:	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	2.2	2.3	2.6	3.1	3.3	3.7	3.8	76%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	28.0	28.5	28.8	30.5	31.4	33.2	34.3	23%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	:	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	3.3	3.3	3.3	3.4	3.3	3.3	3.3	-2%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	96.7	96.7	96.7	96.6	96.7	96.7	96.7	0%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	0.9	0.9	0.9	1.0	1.0	1.0	1.0	14%	10%
Unit costs of home care per recipient, as % of GDP per capita	27.7	27.5	28.7	30.3	31.5	31.2	30.7	11%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	:	:	:	:	:	:	:	:	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.24. SLOVAKIA

General context: Expenditure, fiscal sustainability and demographic trends

GDP per capita in PPS is at 21,600 and below EU average of 29,600 in 2015. Slovakia currently has a population of 5.4 million inhabitants and is projected to reach 4.9 million in 2070, a decrease of 10%, in contrast with an increase in the EU as a whole of 2%.

Health status

Life expectancy at birth for both women and men is respectively 80.2 years and 73.1 years in 2015 and is below the EU averages (83.3 and 77.9 years, respectively). Healthy life years at birth are with 55.1 years (women) and 54.8 years (men) far below the EU-averages (63.3 and 62.6, respectively). The percentage of the Slovak population reporting a long-standing illness or health problem is slightly lower than in the Union (30.4% in Slovakia versus 34.2% in the EU). The percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 9.3%, which is higher than the EU-average (8.1%).

Dependency trends

Dependency is expected to increase in Slovakia. The number of people in dependency is forecasted to increase from 510 thousand in 2015 to 770 thousand in 2070, a 52% change, higher than the increase in the EU (25%). Additionally, the proportion of the population being dependent in terms of severe limitations in daily activities is projected to increase from 9.3 to 15.6%, giving a 68% increase, compared to the more modest EU trend of 21%.

Expenditure projections and fiscal sustainability

When it comes to public expenditure on long-term care as a percentage of GDP, rising trends are expected ⁽⁵⁶⁵⁾. In the "AWG reference scenario", encapsulating health-status and demographic cost drivers, Slovakia's public expenditure is expected to increase from 0.9 to 1.5 pps of GDP until 2070. The "AWG risk scenario", which in comparison to

the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending up to 2.9 pps of GDP by 2070. Over the long run, medium sustainability risks appear for the Slovak Republic. These risks derive primarily from the projected impact of age-related public spending (notably healthcare and pensions) ⁽⁵⁶⁶⁾.

System Characteristics

Long term care (LTC) in Slovakia is regulated by separate pieces of legislation. LTC is in the competence of the Ministry of Health in cooperation with the Ministry of Labour, Social Affairs and Family. The Ministry of Labour, Social Affairs and Family is specifically in charge of: 1) compensations of social consequences of a severe disability mainly in the field of self-service including necessary tools, providing monetary contribution for care-taking and monetary contribution for personal assistance; 2) providing or ensuring social services at home, mainly home nursing services. In institutions – providing social services in a social service facility, in an outpatient or hospitalised form, weekly or yearly. Developing an integrated legal framework for LTC remains one of the key policy challenges in Slovakia.

For the moment, there is a poor coordination between health and social long-term care, but lack of coordination is perceptible also between state administration and regional/local administration. There is an acute demand for measures integrating health and social care into one institution.

Based on the 2018 Ageing Report, total public spending on LTC (health and social part) ⁽⁵⁶⁷⁾ reached 0.9% of GDP in 2016 far below EU average of 1.6% of GDP. The low level of funding implies that a considerable part of current LTC needs are not covered by public means. This is supported by the fact, that in 2017, approx. 4,000 dependent people were on waiting lists for social

⁽⁵⁶⁵⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

⁽⁵⁶⁶⁾ European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁵⁶⁷⁾ Long-term care benefits can be disaggregated into health-related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

care institutions places. Thus, informal care provided by family members or close non-relatives plays a decisive role in Slovakia (⁵⁶⁸).

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 56.3% higher in Slovakia. It means that approximately 1 out of 2 individuals aged 15 or more and declaring themselves as severely dependent, would receive some kind of formal care (at home or in institution, in-kind or in cash). Slovakia seems to have below the average usage of cash benefits compared to the EU. In fact, 11% of public LTC spending is done via cash benefits (EU: 15.6%), while the majority of the public expenditure on LTC are devoted to in-kind benefits (89%).

The expenditure for institutional services makes up 48.6% of public expenditure on LTC in-kind benefits (EU: 66%), 51.4% being spent for LTC in-kind services provided at home (EU: 33%). Thus, within its relatively low spending envelope, relative to other Member States Slovakia has a focus on home care.

Types of care, eligibility criteria and user choices: dependency, care needs, income

LTC in the area of health is provided in the form of geriatric care in outpatient departments, specialised hospital departments, day care centres, home nursing agencies, hospices and other facilities. Day care centres and nursing homes are financed from public health insurance resources. Senior and specialised homes belong to the competence of the Ministry of Labour, Social Affairs and Family and are financed by

⁽⁵⁶⁸⁾As explained in footnote (3) there are LTC expenditures that are not included in this number, and which, for the purposes of Ageing Report 2018 were estimated through building a proxy from separate ESSPROS (European System of integrated Social Protection Statistics) data. In particular, a large share of the in-kind benefits of the Ministry of Labour, Social Affairs and Family or the municipalities are not classified as expenditures on LTC in the SHA, though they should be considered LTC expenditure according to the definition below (page 1&2). However, there is no clear concept of LTC in Slovakia and therefore it is difficult to define which of these expenditures should be included and also to quantify the impact using a national methodology. For example, there are homes of social services that provide other kind of services apart from the long-term care but this is not distinguished in the statistics.

municipalities, payments from clients and subsidies of the Ministry of Labour, Social Affairs and Family.

Social LTC benefits are provided in the form of in-kind and cash benefits. Social services are financed by local and regional self-governments, state subsidies, and payments by care recipients. Cash benefits are financed by the State and provided through a network of local offices of labour, social affairs and family.

Legislation defines the minimum duration of a functional disease and the minimum degree of dependence for the provision of the various benefits. The entitlement to cash benefits is means-tested. The recipients' income and assets are taken into account in the eligibility of public benefits. Co-payments apply for recipients of benefits in-kind usually up to the level of "economically justified" costs. The entitlement to and level of cash benefits are subject to a person's income and assets not exceeding a certain ceiling. Higher income thresholds are applied to benefits for children needing care. Benefits in-kind (social service) are also subject to a means test, but under a different procedure. The income shall be considered as the total income excluding one-off state social benefits, child benefit, tax bonuses, scholarships etc. Assets are not counted e.g.: property used for permanent housing, land for own use, or car used by severely disabled persons. The cash benefit is reduced as income increases and when income is over 5-times the subsistence minimum, the cash benefit is withhold.

Payment for social services to the level of economically justified costs only relates to the provision of social services and not to compensations. In all-year residential facilities of social services, the law regulates an income protection up to 25% of living wage. In case of home nursing service, there is a guaranteed income balance amounting at 1.4 times the living wage.

Social services in Slovakia, including long-term care, are decentralised and are financed from the budgets of municipalities and higher territorial units. An amendment to the Act on Social Services which came into force on 1.3.2012 introduced also direct state participation in the financing of particular types of social services (mostly long-

term care) belonging to the municipalities and private providers of social services at the municipal level. The Ministry of Labour, Social Affairs and Family gives to the providers of social services normative financial contribution in a fixed amount. The amount depends on the type of social services, e.g. contribution for a client in a facility for elderly persons is €320 per month; contribution for a client in a facility-supported living is €200 per month. This expenditure only has partial impact on the LTC expenditure level according to the SHA classification.

Prevention and rehabilitation measures

The system of social services encompasses facilities and activities focused on social prevention and rehabilitation and support to independent living (e.g. rehabilitation centres, daily care stations, specialised activities such as ergo-therapy, access to ICT and cultural events, social counselling). Compensatory cash benefits enable disabled persons to adjust their housing or improve mobility to reduce dependence on other person's assistance. However, preventive and rehabilitative activities comprise only a minor part of social LTC.

Formal/informal caregiving

There are four major classes of LTC carers:

(1) Informal carers - nearly 60,000; they receive cash benefits for care, whereas only about 2% are working at the same time. During the caregiving period, the health and pension insurance is being paid by the state and they are entitled to use public supportive services, which are currently used marginally. Families are mostly reluctant to use professional LTC services if they are able to provide care "on their own".

(2) Home nursing - done by approx. 6,300 employees of municipalities or private providers. The extent of the service depends on the client's needs that are assessed by a medical expert. Home nursing is funded from the health insurances.

(3) Personnel within residential care - circa 18,000 employees in permanent residential care in different types of social services for adults and

seniors; short-term services (care on a daily or weekly basis ⁽⁵⁶⁹⁾) are used only occasionally.

(4) Volunteers – only registered at non-public residential providers, in 2008-2010 they represented nearly 30% of workers working for private providers of LTC.

Recently legislated and/or planned policy reforms

The crucial role of informal (family) care for providing long-term care services in Slovakia is generally acknowledged. However, policy reforms in the past years were targeted almost exclusively on the formal sector of LTC, and improvement of informal care is still outstanding. In 2018, the Ministry of Health introduced additional nursing services in social residential facilities (such as treatment of bedsores, positioning the patient, application of drugs, nursing rehabilitation, etc.) to be reimbursed by the health insurances. However, the reimbursement for nursery care in residential homes from health insurances is linked to a minimum level of bed capacities in municipalities, set by the Ministry of Health and effective from January 2018.

The Institute of Health Policy of the Ministry of Health currently co-operates with the Ministry of Labour, Social Affairs and Family to prepare a strategy for LTC. The strategy aims to create the optimal integrated model of LTC care. The National Programme for Active Ageing 2014-2020, approved by a government resolution in 2013, gives the possibility to introduce insurance for LTC by 2020 by the Ministry of Labour, Social Affairs and Family in cooperation with the Ministry of Finance. The strategy of de-institutionalisation of social services and strengthening of care, approved by a government resolution end-2011, foresees a systemic transition from institutional to community-based care ⁽⁵⁷⁰⁾. It

⁽⁵⁶⁹⁾ Providing LTC is not yet based on a comprehensive legislative framework (see planned policy reforms), such that the types of care are not precisely defined. This issue falls within the competence of the Ministry of Health.

⁽⁵⁷⁰⁾ Piloting de-institutionalisation is the main goal of a project called "Supporting the process of de-institutionalisation and transformation of the social services system –NP DF". The Ministry of Labour ran the project from 2013 to 2015. The project was successfully finished and will be followed by two other projects cofounded by the EU structural funds.

includes limits on capacity of institutions and restrictions on the year-round provision of care in certain types of facilities (e.g. homes of social services shall provide only care on a daily or weekly basis). In addition, new types of services aim to support independent living of persons with disabilities and strengthen social prevention and early intervention.

Challenges

The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities with respect to the provision of long-term care services; to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; to strategically integrate medical and social services via such a legal framework; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers.
- **Improving financing arrangements:** to face the increased LTC costs in the future e.g. by tax-broadening, which means financing beyond revenues earned by the working-age population; to foster pre-funding elements, which implies setting aside some funds to pay for future obligations; to explore the potential of private LTC insurance as a supplementary financing tool.
- **Encouraging home care:** to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; to monitor and evaluate alternative services, including incentives for use of alternative settings.
- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Facilitating appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; to steer LTC users towards appropriate settings.
- **Improving value for money:** to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.24.1: Statistical Annex – Slovakia

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	39	46	56	66	64	68	71	73	74	76	79	12,451	13,213	13,559	14,447
GDP per capita, PPS	15.0	16.1	17.7	18.5	17.5	19.0	19.2	19.6	19.8	20.6	21.6	26.8	28.1	28.0	29.6
Population, in millions	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	5.3	5.2	5.1	5.3	264.1	283.2	352.1	373.6
As % of total government expenditure	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	78.1	78.4	78.4	79.0	79.1	79.3	79.8	79.9	80.1	80.5	80.2	82.6	83.1	83.3	83.3
Life expectancy at birth for males	70.2	70.4	70.6	70.9	71.4	71.8	72.3	72.5	72.9	73.3	73.1	76.6	77.3	77.7	77.9
Healthy life years at birth for females	56.6	54.6	56.1	52.5	52.6	52.0	52.3	53.1	54.3	54.6	55.1	62.0	62.1	61.5	63.3
Healthy life years at birth for males	55.2	54.5	55.6	52.1	52.4	52.4	52.1	53.4	54.5	55.5	54.8	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	27.5	27.3	29.6	29.5	30.7	31.6	29.8	30.7	30.3	30.4	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	11.1	10.4	11.2	10.8	10.4	10.2	10.0	9.6	9.9	9.3	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	:	10	20	30	31	31	45	46	46	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	28	34	41	47	48	49	62	62	63	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.5	0.8	1.1	1.4	1.5	1.5	2.0	2.0	2.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	44	49	51	50	54	57	58	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.24.2: Statistical Annex - continued – Slovakia

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	5.4	5.5	5.5	5.4	5.3	5.1	4.9	-10%	2%
Dependency									
Number of dependents in millions	0.51	0.53	0.62	0.69	0.73	0.76	0.77	52%	25%
Share of dependents, in %	9.3	9.7	11.3	12.9	13.8	15.0	15.6	68%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	0.9	1.1	1.2	1.4	1.5	1.5	64%	73%
AWG risk scenario	0.9	1.0	1.2	1.5	1.9	2.4	2.9	222%	170%
Coverage									
Number of people receiving care in an institution	49,586	52,623	64,777	78,157	86,026	95,890	102,655	107%	72%
Number of people receiving care at home	67,645	69,155	70,090	68,589	64,564	58,282	52,284	-23%	86%
Number of people receiving cash benefits	167,390	176,660	203,021	223,848	236,590	246,036	242,100	45%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	5.2	5.5	6.2	6.9	7.4	7.8	8.1	55%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	56.3	56.1	54.9	53.7	53.3	52.4	51.8	-8%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	88.9	88.6	88.8	89.1	89.2	89.5	89.8	1%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	11.1	11.4	11.2	10.9	10.8	10.5	10.2	-8%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	48.6	49.5	53.6	58.4	62.4	66.9	70.2	44%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	51.4	50.5	46.4	41.6	37.6	33.1	29.8	-42%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	42.8	42.5	44.4	44.6	46.0	46.5	44.6	4%	10%
Unit costs of home care per recipient, as % of GDP per capita	33.2	32.9	35.4	36.2	36.9	37.8	37.3	12%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	3.3	3.3	3.3	3.3	3.2	3.2	3.1	-6%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.25. SLOVENIA

General context: Expenditure, fiscal sustainability and demographic trends

Slovenia has a population of just above 2 million inhabitants, which is slightly more than 0.4% of the EU population in 2016 and is projected to decrease by 5% by 2070. With a GDP of 39 billion, or 22,600 PPS per capita in 2015 it scores lower than the EU weighted average (29,600). When looking at the unweighted average and at the median level though, respectively 25,200 and 22,100 PPS, Slovenia faces a significantly lower gap, standing at 89.7% of the average, and closely resembling the median. Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part) ⁽⁵⁷¹⁾ is with 0.9% of GDP in 2015 under the EU average in the same year (1.6%).

Health status

Life expectancy at birth for both women and men was respectively 83.9 years and 77.8 years in 2015, similar to the EU average (83.3 and 77.8 years for men and women respectively). Nevertheless, in 2015 the healthy life years at birth for both sexes were significantly lower than the EU average, with 57.7 years for women and 58.5 years for men (63.3 and 62.6 respectively in 2015). At the same time the percentage of the population having a long-standing illness or health problem was in 2015 slightly lower than in the EU as a whole (33.1% and 34.2% respectively) ⁽⁵⁷²⁾. The percentage of the population indicating a self-perceived long-standing severe limitation in its daily activities has been fluctuating since 2006 (the highest level being 13% in 2011), but despite remaining above the EU-average of 8.1%, the trend seems to have changed in the last years with an overall decrease that reached 9.8 in 2015, only slightly above the 2014 value ⁽⁵⁷³⁾.

⁽⁵⁷¹⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

⁽⁵⁷²⁾ Source Eurostat, People having a long-standing illness or health problem, by sex, age and labour status [hlth_silc_04].

⁽⁵⁷³⁾ According to EU-SILC Survey (Eurostat Database- Population and Social Conditions- Health- Health Status).

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase over the coming 50 years. From 220 thousand residents living with strong limitations due to health problems in 2016, an increase of 18% is envisaged until 2070 to around 260 thousand, which is lower than the EU average of 25% over the same period. According to this scenario, the dependents are becoming a bigger group also as a share of the population and an increase of 25% is projected (from 10.6% to 13.2%), which, conversely, is above the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is projected to steadily increase. In the "AWG reference scenario", public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of 0.9 pps, bringing Slovenia from 0.9 ⁽⁵⁷⁴⁾ to 1.8% of GDP spent on long-term care in the period 2016-2070, with a steeper increase than for EU average (93% and 73% respectively) ⁽⁵⁷⁵⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.5 pps of GDP by 2070. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure on medium and long run. Medium fiscal sustainability risks appear over the medium and the long run due, especially for the long-term risk categorisation, to the projected increase in age-related public

⁽⁵⁷⁴⁾ Including public expenditure on LTC (1% of GDP) according to SHA (health and social part) and cash-benefits for economic integration for handicapped from ESSPROS disability function (0.4% of GDP).

⁽⁵⁷⁵⁾ The 2018 Ageing Report: https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

spending, notably deriving from long-term care, healthcare and pensions ⁽⁵⁷⁶⁾.

System Characteristics

Administrative organisation

Currently, there is no uniform system of long-term care (LTC) in Slovenia. There is no definition of long-term care and therefore no unified entry point or a standard model for assessing care needs for health and social services which could be classified as long-term care services. This creates risks of inefficiencies and makes it more difficult for the user to obtain comparable services for comparable needs and to navigate the system. Different forms of services and benefits which could be classified as LTC services are provided within the health care system, social and parental protection system, pension and disability system and the system of care for the disabled, and are regulated by different acts from these areas. The provision of community based social and healthcare services is not well coordinated between providers of health and social care services and the financing of the system is fragmented. Until now, Slovenia has focused its limited spending on institutional care rather than home care. Over the last fifteen years the government has been preparing a new umbrella regulation, which would bring all the different recipients and benefits under one rule. A new draft legislative proposal aims to establish a fiscally sustainable and accessible LTC system which combines the health and social aspects of care with integrated LTC services, with emphasis on prevention and strengthening the capabilities of the user, with the aim of later transition into higher categories of dependence on the assistance of another person. At the same time it is necessary to strengthen e-care and reduce the administrative burden (with the aim of directing human resources to working with users rather than bureaucracy). The last draft version of the legislation was in public discussion and inter-ministerial coordination in 2017 and awaits the new government which will proceed with the law drafting. However it seems that the revised draft will have to undergo an additional public consultation as currently there is no consensus on

⁽⁵⁷⁶⁾ European Commission (2018), Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

how the element of financing should be solved. In the spring of 2015, a comprehensive analysis of the Slovenian health care system has started, in the context of which an analysis of long-term care was also carried out. The analysis was completed in December 2015. Key findings are hereby presented ⁽⁵⁷⁷⁾.

Long-term care expenditure in Slovenia represents only a small component of GDP, and is much lower than health care spending, but is growing much more rapidly. Even on optimistic assumptions about the levels of disability, the effects of demographic change will be to increase expenditure on long-term care by more than 50% by 2035.

There are four main public funding sources for long-term care, but nearly half of the public long-term care spending is by the Health Insurance Institute.

The Health Insurance Institute will see the largest absolute growth in long-term care spending because of its focus on long-term care for older people. The Ministry of Labour will see only a smaller increase given the focus on long-term care for non-elderly people.

Private spending on long-term care is almost all out-of-pocket spending by recipients and this has been growing significantly. On current policy and practice this would increase rapidly (given that the services paid for privately are likely to grow rapidly) and this might not be sustainable.

There is unnecessary complexity in the current public funding of long-term care that leads to confusion about entitlements, difficulty in brokering access to combinations of services needed by users, and this may be a factor in the over reliance on residential care.

Consideration should be given to reducing the complexity of (particularly the public) funding of long-term care. This might be achieved either by shifting responsibility to a single government

⁽⁵⁷⁷⁾ Analysis of Health Care System in Slovenia. European Observatory for Health Care Systems, WHO and the Ministry of Health of the RS. Available at : http://www.mz.gov.si/fileadmin/mz.gov.si/pageuploads/Analiza/24_11_2015/Long_Term_Care_in_Slovenia_Charles_Normand.pdf.

department and/or agency, or by mechanisms that aim to co-ordinate the spending and entitlements between the different funding organisations.

Consistently with the findings of the Ageing Report, this study shows that long-term care spending is likely to grow rapidly. In addition, the rate of growth will vary hugely between the different public funders of care. With a much longer time scale it would be possible to derive more precise estimates of the changing costs to the different drivers, but the current calculations display clearly the patterns of likely change.

As mentioned above, different forms of services and benefits, which could be classified as LTC services are provided by different systems (healthcare, pension, social and parental protection etc) and are regulated by different acts from these areas.

Long-term care in Slovenia includes cash benefits and benefits in kind (health care and/or social services for institutional care and only social services for home care). Health care services which could be classified as long-term care are not available in home care settings. The provision of community based social and healthcare services is not well coordinated between providers of health and social care services and the financing of the system is fragmented. Until now, Slovenia has focused its limited spending on institutional care rather than home care. Cash benefits and institutional care are organised centrally whereas home care services are provided on a local level.

Funding for long-term care expenditure comes from several sources. Health care benefits in kind (institutional and community services) are financed from the compulsory (99%) and the complementary (1%) health care insurance⁽⁵⁷⁸⁾. Currently, the regulation of obligatory social insurances is made in a way that contributions are paid by both employers and employees (including self-employed). Inactive persons are insured either through their active close relatives (children and youngsters in full-time education) or the reduced contributions for them are paid from the state and municipalities' budgets (pensioners, unemployed,

⁽⁵⁷⁸⁾ Yearly data on national health expenditure prepared in accordance with System of Health Accounts 2011 methodology; also available in OECD Stat 2018.

beneficiaries of minimum income)⁽⁵⁷⁹⁾. Cash benefits which are directed to persons with health care needs or with limitation in performing basic activities of daily living (ADL)⁽⁵⁸⁰⁾, are financed from the Pension and Disability Fund and partially by the state budget (Ministry of Labour, Family, Social Affairs and Equal Opportunities)⁽⁵⁸¹⁾.

Social services which could be classified as long-term care are partially financed from the state and the municipalities' budgets, and partially paid by the users (recipients). Out-of-pocket payments for social care services depend on the financial situation of a person in need. In case a person has insufficient financial means, the relatives and/or the municipality cover expenses of residential or home care services. Health and social care services which can be classified as long-term care for disabled children and disabled youth in full-time education are entirely (in the case of youngsters in full-time tertiary education only partially) covered by the health care insurance and the state budget.

Providers guaranteeing different services within the scope of institutional forms of assistance integrate health care and social areas, while the assistance has not been integrated in the context of forms provided in the living home environment.

At the beginning of 2016, the National Parliament adopted the Personal Assistance Act, which will be implemented in 2019. The law regulates the right to a personal assistant for active working population with disabilities who need more than 30

⁽⁵⁷⁹⁾ For example, in Slovenia there are more than 600,000 pensioners, and they do not pay directly any public social insurance contributions (part of compulsory health insurance for them is covered from the state budget) and are nearly 100% included in the voluntary private additional health care insurance.

⁽⁵⁸⁰⁾ Basic Activities of Daily Living (ADL) include bathing, dressing, eating, getting in and getting into and out of bed or chair, moving around and using the bathroom. Often they are referred to as "personal care" (Colombo et al. 2011). According to the System of Health Accounts methodology (OECD, WHO, Eurostat, 2011) expenditure related to provide help to people with ADL limitations are classified under code HC.3 as LTC health expenditure which means that are included also in health expenditure. However, expenditure for LTC social services (related to IADL limitation – Instrumental Activities of Daily Living) are classified under code HC.R.1. LTC social expenditure are included in total LTC expenditure (HC.3 plus HC.R.1), but excluded from health expenditure.

⁽⁵⁸¹⁾ Pension insurance contributions would represent as much as 2.4% of health care financing.

hours of assistance per week (ADL and IADL) and are not treated in the institutional care.

Types of care

For systematic statistics and monitoring of performance and development of long-term care an inter-institutional working group for statistical monitoring of the system was set up in 2012⁽⁵⁸²⁾. The results of the working group were published in 2014⁽⁵⁸³⁾. Since then, the Inter-institutional Working Group for statistical monitoring at the Statistical Office of RS has no longer been active, and has been replaced by a newly established inter-institutional working group for the monitoring of long-term care⁽⁵⁸⁴⁾. The working group members are representatives of the relevant government departments, representatives of the professions and academics.

Four modes of long-term care provision are included in the current system of long-term care: in-patient care (institutions), day-case care, home care and cash benefits (according to the SHA framework).

Inpatient long-term care (institutional care) is organised by homes for the elderly, special social institutions, centres for training, occupation and care and centres for education of children with special needs. There were 22,415 people altogether residing in these institutions at the end of 2015; mainly in homes for elderly. Inpatient long-term

care was provided for 5.9% of population aged 65 years and over⁽⁵⁸⁵⁾.

There were less than 500 users of organised day care, which accounts for 0.1% of population aged 65 years and over. They were mainly included in day care organised by homes for elderly.

Home-based care is organised by community nursing care, home help, family assistant, personal assistance and housing groups. More than 21,600 people received this kind of care at the end of 2015; mostly community nursing care and home help. Home-based care was provided to 5.7% of population aged 65 years and over.

Regarding the total number of cash benefits recipients in 2015 there were almost 42,000 recipients of cash benefits (Attendance and Allowance Supplement based on 6 different acts), of which around 62% were aged 65 years and over and 40% were aged more than 80 years; about 60% were women and 40% men. However, if we are taking into account overlapping between cash benefits and services in kind, there were only 16,570 recipients of cash benefits who only received cash benefit and were not included in any other service classifiable as long-term care. Cash benefits only were received by 4.4% of the population aged 65 years and over.

It is estimated that there were altogether approximately sixty thousand recipients of formal services classifiable as long-term care and cash benefits at the end of 2015; this accounts for 16.1% of population aged 65 years and over. Inpatient care (in institutions) is very well developed and spread in Slovenia. It has a long tradition. Community nursing care is also well spread and developed. On the other hand, home-based social care started to develop approximately twenty years ago and it is still not well developed. Even though the number of people receiving home-based services which can be classified as long-term care is relatively high, the care is not as intensive and comprehensive as in the case of institutional care and services of health and social care are not integrated.

⁽⁵⁸²⁾ Appointed by the Statistical Office of the Republic of Slovenia and led by Social Protection Institute of the Republic of Slovenia. The working group, which is no longer active, included representatives of all main actors providing data on services and benefits which could be classified as LTC services and benefits (in addition to already mentioned institutions, the Institute of Macroeconomic Analysis and Development, the Ministry of Labour, Family Social Affairs and Equal Opportunities, the Ministry of Health, the Slovenian Community of Social Institutions, the National Institute of Public Health, the Pension and Disability Insurance Institute, the Institute for Economic Research and the Health Insurance Institute of Slovenia).

⁽⁵⁸³⁾ Source: Nagode, Mateja, Eva Zver, Stane Marn, Anita Jacovič, Davor Dominkuš. Long-term care – use of international definition in Slovenia. Working paper No. 2/2014 XXIII. Ljubljana: IMAD.

⁽⁵⁸⁴⁾ Decision of the Minister no. 0241-2 / 2017 from 11.4.2018.

⁽⁵⁸⁵⁾ Source: Statistical Office of the RS; <https://www.stat.si/StatWeb/en/News/Index/7116>.

Eligibility criteria

There is no definition of long-term care, no unified entry point nor a model of long-term care needs assessment. The eligibility for a health or social service which could qualify as long-term care is linked to the service in question and is made by a team of professional workers (in the case of institutional care) or by an individual professional worker (in the case of home care). Cash benefits are granted upon application and approval of the expert team (assessing the care needs).

Co-payments, out of the pocket expenses and private insurance

Benefits in kind are income tested, taking into account recipient, spouse and children.

Out-of-pocket payments depend on the financial ability of a person entitled. In case a person entitled has insufficient financial means, municipalities cover expenses of residential or home care services.

Based on the rules set by the government (Decree on criteria for defining exemptions in the payment of the services, OG RS 110/04,124/04,114/06) the competent local "Centre for Social Work" decides on partial or complete exemption of the user from the payment of the services. The decree defines *the social security threshold*, set as an amount of money that has to remain at disposal of the user after the payment of the services. Further, the decree defines the *ability to pay* as the maximum amount up to which the user is able to participate in the payment of these services. The *payment contribution* is the amount that needs to be paid to the provider of the services and the *exemption from the payment* is defined as the amount which the user of the service is not able to pay according to his/her calculated ability to pay.

The *exemption from the payment* is defined as the difference between the value of the service and user's contribution, whereas the *exemption of the one, who is liable to pay for the services*, is defined as the difference between the amount of the exemption of the payment of the user of the services and the payment contribution. The one being liable for the payment is a physical or legal entity that is not a family member and is obliged to pay the costs of the services. If the contributions of

the user and the liable person do not cover the costs of the services, the difference between the value of the services and both contributions is paid by the local community or the state. In this case the user must ask the competent "Centre for Social Work" for the exempt from payment of all the costs.

Additionally to the criteria defined in the aforementioned decree, the local communities can decide on additional exemptions from payment of the costs of home care services.

If the user of the service who is asking for the exemption from payment of the services is the owner of a real estate property, the issuing of the written order on exemption from payment contains the prohibition from alienation or burdening of this real estate to the credit of the municipality which finances the institutional care of the user. If the user asks for the exemption from the payment of home care services, the prohibition from alienation or burdening is issued only for real estate in the property of the user which is not used as the permanent residence of the user.

A family assistant has a right to the partial coverage of the lost income on the level of the minimal wage or to the proportional coverage of the lost income if he/she stays in a shorter than full time employment. The family assistant has full pension and disability insurance contributions paid as well as contribution for the case of unemployment and parental leave. The time spent for providing the services as family assistant is included into the pensionable period (which is a condition for receiving old age pension after retirement).

Total (public and private) expenditure on long-term care in 2015 amounted to roughly 1.26% of GDP (in 2016 1.24% of GDP) ⁽⁵⁸⁶⁾. The expenditure for long-term care has been increasing over the years, from 1.08% GDP recorded in 2005. This is mainly due to an increased number of users. In addition, private expenditure has been increasing much faster than public expenditure. Hence, in terms of financing sources, the share of total long-term care accounted for by private expenditure increased in the period 2005-2013

⁽⁵⁸⁶⁾ Source: Statistical Office of the RS; <https://www.stat.si/StatWeb/en/News/Index/7478>.

(⁵⁸⁷), which has important implications from the social point of view, i.e. affordability of formal care and quality monitoring of informal care (⁵⁸⁸).

Role of the private sector

The providers of services can be public or private entities. Private providers are selected through public tenders and are granted concession with limited duration; they have to fulfil the same conditions as public providers. The standards for provision of services are quite strict (regarding the number of staff, qualifications, procedures, technical equipment and premises) and are defined by the state in the case of social care services (both institutional and home-based care), and by the Health Insurance Institute in the case of health care (institutional and community) services.

Institutional care is organised within the network of institutions for elderly, disabled adults and severely disabled children. Persons staying in residential care are provided with integrated health and social care services. The costs of accommodation are also part of institutional service.

Community nursing and home help are regulated within different regulatory systems. Therefore providers are not the same and operate separately under different regulatory systems. Community health services including services that qualify as long-term care are provided by community nurses who are employed by local health centres or are given a concession. They perform preventive and health education services, health-related services at home and to a certain extent also home help services. They are one of the first professional workers to identify health and social hardship as well as the needs of individual persons and their families for home and long-term care.

Home help is adjusted to the needs of an individual and includes housework assistance (IADL); assistance in essential daily activities (ADL) and

(⁵⁸⁷) From 22.2% to 26.3%, respectively. Source: Statistical office of the RS; <https://www.stat.si/StatWeb/en/News/Index/7478>.

(⁵⁸⁸) Note that at-risk-of-poverty rates among elderly people are over-average and the average monthly pensions are relative low (around €560 in 2015). In this context the increase in the out-of-the-pocket contributions can lead to social problems in the future as it puts affordability of formal care at risk.

assistance in maintaining social contacts. The "Social Protection Institute" carried out a few analysis of the situation of home care in Slovenia. The last analysis (Lebar et al, 2015 (⁵⁸⁹)) showed that home help is provided mainly by public agencies (i.e. centres for social work and homes for older people) and only few were private organisations with concessions.

Formal/informal caregiving

Formal long-term care caregivers (⁵⁹⁰) must meet in relation to education and other working conditions strict rules. Some non-professional providers (family assistant or personal assistant) must already take part in special education programs. Educational programs and their frequency are defined by the "Social Chamber" and approved by the "National Professional Council".

Until a few years ago, Slovenia had no national policy that would deal with informal family carers (⁵⁹¹) directly. There were some acts, which

(⁵⁸⁹) Lebar, L., Kovač, N., Nagode, M. (2015) *Izvajanje pomoči na domu. Analiza stanja za leto 2014*. Ljubljana: Inštitut RS za socialno varstvo. Available at: https://www.irssv.si/upload2/pnd/IRSSV%20Izvajanje%20pomoci%20na%20domu%20%20analiza%20stanja%20v%20letu2014_koncno.pdf.

(⁵⁹⁰) Carers in inpatient LTC (in institutions): Latest available data of Associations of social institutions of Slovenia indicate that there were 9,943 people employed in homes for elderly and special social institutions in December 2012. Out of these, there were 4,823 people employed in social care and 4,776 people in health care (344 in others). According to the data of Statistical Office of the Republic of Slovenia there were 1,036 carers employed in centres for protection and training – 907 in social services, 61 in health care services and 68 in training services (employment). Carers in home-based LTC: According to the data of Social Protection Institute of the Republic of Slovenia there were 62.4 coordinators of home help at the end of 2012. Home help was carried out by 911 carers, 92.7% of them were regularly employed. In 10.6% local municipalities there was a shortage of carers. According to the data of National Institute of Public Health there were altogether 821 community nurses in Slovenia at the end of 2012 (covering the whole field of community nursing and home care not only LTC). Ministry of Labour, Family, Social Affairs and Equal Opportunities reports that there were 745 family assistants in 2012 and around 800 personal assistants.

(⁵⁹¹) Informal carers: The results of SHARE survey for 2013 show that in Slovenia around 48,000 people aged 50 or more provided personal care or home help to a person outside their own household (6.5 % of respondents) and around 37,000 people aged 50 and over provided personal care within their own household (6.1% of respondents). Similar share of respondents was for countries in Continental Europe (5-8%), lower in Scandinavian

indirectly concerned informal family carers: Pension and Disability Insurance Act mentions the right to attendance allowance; Health Care and Health Insurance Act the right to compensation for care-giving to a close family member, with whom the insured lives in a common household and Act Amending the Social Security Act that enables family carers as family assistants to get, under specific rules, a financial compensation. Since 2006 several strategic documents were adopted that emphasize the importance of informal carers, mainly to give adequate training and services on the local level (day care, respite care) to the families who care for a disabled elderly family member and to support measures allowing more flexible working arrangements (the right for part-time work without the danger that the carer would lose social security).

Prevention and rehabilitation policies/measures

In 2011, Slovenia started to develop the network of model practices within the family medicine practice where the preventive activities for the chronically ill or users of long-term care in the home environment are exercised. More than 340 model practices are already operating.

Rehabilitation programs related to long-term care are systematically carried out in the framework of the activities of homes for the elderly and are funded by health insurance institute. There is a lack of such programs in local communities.

Recently legislated and/or planned policy reforms

Over the last 15 years there were several attempts to prepare the long-term care system reform. Several drafts of the act that would regulate the

whole system of long-term care and the potential (new) compulsory insurance for long-term care were prepared by different stakeholders (Ministry of Labour, Family, Social Affairs and Equal Opportunities, Health Ministry, Association of Providers of Institutional Care, NGO Pensioner's Association). The differences between draft acts prepared by different stakeholders were not so much in the content (arrangements of the system), but mostly in the approach to financing the long-term care system.

The need for long-term care system reform and plans for it also became part of strategic documents, such as the main national development strategy in the area of social protection, the "Resolution on the National Programme of Social Protection for the period 2013-2020" and the strategic document for the health care, the "Resolution on the National Healthcare Plan 2016-2025: Together for the society of health", passed in the parliament in March 2016 and envisaging:

- 1) the integration of health and social services in the area of long-term care;
- 2) strengthening of rehabilitation, reintegration, and prevention for all age groups;
- 3) securing sufficient funds for health and long-term care based on solidarity principles.

Besides the plan for long-term care reform both documents emphasises the development of community based services and unification of health and social home care services. In the draft operational programme for the use of structural EU funds in the new financial perspective, the emphasis is also on de-institutionalisation and support for development of community based services (such as day centres, smaller residential units, etc.).

Since 2012, the long-term care reform is high on the political agenda. A working group for the methodological, statistical and financial issues regarding LTC was established in 2012 ⁽⁵⁹²⁾. At the end of 2013, the government adopted the starting points of the reform of LTC system, including the calendar for the reform. It was agreed that the first step of the reform will be the

countries (3.5%) and higher in Southern European countries (9-11%). (Nagode, M. in Srakar, A, 2015. Značilnosti starejšega prebivalstva v Sloveniji – prvi rezultati raziskave Share, Institut za ekonomske raziskave, 2015). Research done by Anton Trstenjak Institute of gerontology and intergenerational relations show similar situation that in Slovenia more than 55,000 people aged 50 or more is taking care of their parents and more than 50,000 of their frail partner (Ramovš, J., Lipar, T., Ramovš, M. (2014) Oskrba v onemoglosti. V: Ramovš, Jože (ur) Staranje v Sloveniji – raziskava o potrebah, zmožnostih in stališčih nad 50 let starih prebivalcev Slovenije. Ljubljana: Inštitut Antona Trstenjaka).

⁽⁵⁹²⁾ See reference 9.

preparation and adoption of new legislation covering the whole LTC system and thus unifying it. A working group for the preparation of the new legislative act was established, composed by representatives of three ministries (covering areas of health, social affairs and finances), associations of users, associations of service providers, the Health Insurance Institute, the Pension Insurance Institute and the Institute of Macroeconomic Analysis and Development.

However, for several reasons (also conflicting interests and lack of political agreement) the health care reform was stopped and is again planned in the coalition agreement to be carried out by the current government. In the spring of 2015, a comprehensive analysis of the health care system has started, in the context of which an analysis of long-term care was carried out. The analysis was completed in December 2015. One of the main conclusions of the analysis of the health care system was that the reform of the health system and the system of long-term care should be prepared in a coordinated manner and that the activities in this regard should be carried out in 2016. Drafting of a new law on long-term care has been one of the priorities of the present government since 2016. Key actors in this area are, in addition to many other stakeholders, the ministry responsible for social affairs and the ministry responsible for health.

With the new legislation, Slovenia plans to introduce solidarity-based financing of long-term care, based on the principles of social-risk insurance. The main aim of the reform is to ensure fiscal sustainability of the long-term care system, on the one hand, and to increase social security and quality of life of persons depending on care and assistance of other people for performing basic and supportive life activities, on the other hand. The new (reformed) system should provide the availability and access to quality services that will enable care and support to individuals in need, especially at home and local community environment.

The reformed long-term care system should also have a positive effect on the reduction of poverty among elderly people (which is above average now). As pensions are relatively low, and the extent of out-of-pocket payments of people in need has been increasing, this currently puts pressure on

the budgets of elderly and their families. With the planned system of long-term care financing, the out-of-pocket contributions would be reduced and even eliminated for the economically disadvantaged.

By the end of the year 2016, the government decided to transfer the responsibility for the preparation of the Long-Term Care Act from the ministry responsible for social affairs to the Ministry of Health, where the Directorate for long-term care was established on 1st January 2017. With this transfer, also the coordination of the integrated providers' network development and coordination of pilot projects in the area of long-term care was transferred to the Ministry of Health. The preparation of the Long-term care Act was intensified and submitted into public debate in autumn in 2017, and currently awaits the new government which will proceed with legislative procedure.

The draft act is based on the agreement that the need for long-term care is a new social risk for which the residents of Slovenia have to be insured within the system of public social insurances and on the universal right to long-term care. The new act will also try to ensure that users have the access to quality integrated services, mainly in the local environment (community and home based services) or cash benefits.

The new act will be titled "Act on long-term care and compulsory insurance for long-term care" and will regulate both the provision of services and the financing of the system: with introduction of public compulsory insurance, and additional possibility of voluntary private insurance for non-standard services and accommodation costs in institutional care facilities.

Thus the Act will regulate:

- LTC insurance and financing of activities;
- definition of beneficiaries and rights (services);
- procedure of claiming the rights (including needs assessment);
- provision of LTC services;

- providers of LTC services and public network of providers;
- quality and safety;
- monitoring and information system;
- connection with the health and social care system.

The draft act envisages a single entry point and a uniform procedure for eligibility assessments. The person in need will take part in the assessment procedure and will at the end decide for the type of care and support needed and preferred (services or cash-benefit or personal assistant).

The Social Protection Institute of RS conducted with the partners a pre-pilot project to test and adapt the chosen assessment tool and procedure for the eligibility criteria and the personal planning procedure in 2017.

If the person in need decides for cash-benefits to be used for informal domestic care or for a personal assistant, the user is entitled to 14 days of respite care and the informal carer has the right to appropriate training and advice. Other planned elements of the system are the supervision over the domestic care, the final decision on the threshold of the need of ADL services, the scope and the content of the rights and provisions.

The new system should encourage independent living, user engagement and the use of ICT in long-term care.

Merging of different sources of financing of long-term care system should provide more transparency and effectiveness of financing of this area.

Individual planning, participation of users in the process of preparation of personal care plans and the responsibility of providers for realisation of individual care plans are the planned mechanisms that should also ensure more effective use of funds.

The reorientation from currently prevailing institutional (residential) care to more community based and home based care should as well have

positive financial effects on the budget (less new investments for institutional infrastructure and redirection of funds to new jobs in community and home based services). However this option is at this stage explicitly not among the future intentions of the government, who does not envisage any restriction to institutional care ⁽⁵⁹³⁾. Strengthening of preventive activities (healthy ageing), rehabilitation and the use of ICT should additionally decrease the costs of long-term care.

However, one of the crucial issues related to the reform is still how to separate the costs of long-term care system from the costs of the health care system and how to ensure an additional stable source which would contain the rapid increase in annual household expenditures for long-term care.

The calculation of the financial impact of the proposed solutions in the new Long-Term Care Act aims to also take into account the increase in labour costs due to recent agreement between the government and trade unions presenting the public sector.

As part of preparations for the introduction of the new legislation, the educational curriculum for various profiles at the secondary level was supplemented, in order to integrate the health and social content of the educational programs on the one side and to provide integrated delivery of services at the other side.

Challenges

Slovenia has a relatively fragmented system of long-term care, with future sustainability concerns, especially in light of high out-of-pocket payments. The main challenges of the system appear to be:

- **Improving the governance framework:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities wrt to the provision of long-term care services; to set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy

⁽⁵⁹³⁾ According to article 5 of the Social Security Act, “rights to services and financial social assistance in Slovenia are exercised on the basis of the principles of equal accessibility and free choice of forms for all beneficiaries under the conditions laid down by law”.

to deliver high-performing long-term care services to face the growing demand for LTC services also by adopting and implementing the necessary legislative acts to reform the current long-term care system; to strategically integrate health and social services via such a legal framework; to establish good information platforms for LTC users and providers, setting up a system of records to monitor the existing situation and improve planning; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes.

- **Improving financing arrangements:** to foster pre-funding elements, which implies setting aside some funds to pay for future obligations; to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage; to reduce the risk of impoverishment of recipients and informal carers.
- **Encouraging home care and independent living:** to develop alternatives and improve eligibility to institutional care by e.g. developing new legislative frameworks encouraging home care, cash benefits or financial incentives to encourage home care; developing services in community care which are currently not accessible and would reduce the pressure on institutions; to monitor and evaluate alternative services, to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers and support to family carers:** to determine current

and future needs for qualified human resources and facilities for long-term care; to improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers; in addition, to continue supporting informal carers, such as through flexible working conditions, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.

- **Ensuring coordination and continuity of care:** to establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** to steer LTC users towards appropriate settings.
- **Changing payment incentives for providers:** to consider a new payment model and a focused use of budgets.
- **Improving value for money:** to encourage competition across LTC providers to stimulate productivity enhancements and digitalisation if based on cost-effective solutions; to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services.
- **Prevention:** to further the efforts in promoting healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.
- **Improving administrative efficiency** including by simplifying the procedures and employing IT solutions based on cost-efficiency considerations.

Table 3.25.1: Statistical Annex – Slovenia

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	29	32	35	38	36	36	37	36	36	38	39	12,451	13,213	13,559	14,447
GDP per capita, PPS	23.2	23.7	24.3	23.9	20.7	21.2	21.5	21.5	21.2	21.9	22.6	26.8	28.1	28.0	29.6
Population, in millions	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.9	0.8	0.9	0.8	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	:	188.0	189.8	264.1	283.2	352.1	373.6
As % of total government expenditure	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.8	1.4	1.7	1.7	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	80.9	82.0	82.0	82.6	82.7	83.1	83.3	83.3	83.6	84.1	83.9	82.6	83.1	83.3	83.3
Life expectancy at birth for males	73.9	74.5	74.6	75.5	75.9	76.4	76.8	77.1	77.2	78.2	77.8	76.6	77.3	77.7	77.9
Healthy life years at birth for females	60.1	61.0	62.3	60.9	61.5	54.6	53.8	55.6	59.5	59.6	57.7	62.0	62.1	61.5	63.3
Healthy life years at birth for males	56.4	57.7	58.7	59.4	60.6	53.4	54.0	56.5	57.6	57.8	58.5	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	36.5	37.7	39.3	30.9	36.1	36.3	35.3	31.6	32.3	33.1	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	8.4	7.9	9.7	10.5	12.1	13.0	11.5	9.5	9.3	9.8	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	8	14	19	24	21	21	22	22	22	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	12	12	13	14	40	38	38	40	41	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.0	1.3	1.6	1.9	3.0	2.9	2.9	3.0	3.1	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.25.2: Statistical Annex - continued – Slovenia

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	2.1	2.1	2.1	2.1	2.0	2.0	2.0	-5%	2%
Dependency									
Number of dependents in millions	0.22	0.23	0.25	0.27	0.27	0.26	0.26	18%	25%
Share of dependents, in %	10.6	10.9	11.9	12.8	13.1	13.3	13.2	25%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	1.0	1.1	1.4	1.7	1.8	1.8	93%	73%
AWG risk scenario	0.9	1.0	1.4	2.1	2.9	3.7	4.4	369%	170%
Coverage									
Number of people receiving care in an institution	35,217	38,050	44,842	54,500	60,976	63,718	64,801	84%	72%
Number of people receiving care at home	34,135	37,014	44,242	54,275	60,730	63,755	64,598	89%	86%
Number of people receiving cash benefits	42,136	45,109	52,122	61,492	68,388	71,524	72,772	73%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	5.4	5.8	6.8	8.2	9.3	10.0	10.3	92%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	51.1	53.0	57.1	64.2	70.8	75.1	78.6	54%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	73.2	74.8	77.9	79.7	81.2	81.5	81.6	12%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	26.8	25.2	22.1	20.3	18.8	18.5	18.4	-31%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	71.2	71.2	70.8	70.7	70.9	70.8	70.8	-1%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	28.8	28.8	29.2	29.3	29.1	29.2	29.2	1%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	28.8	28.2	29.1	30.5	32.3	32.4	31.7	10%	10%
Unit costs of home care per recipient, as % of GDP per capita	12.0	11.8	12.1	12.7	13.3	13.4	13.1	9%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	12.4	11.3	10.0	9.7	9.4	9.3	9.0	-27%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.26. SPAIN

General context: Expenditure, fiscal sustainability and demographic trends

Spain had a population of almost 46.4 million inhabitants in 2016 (according to Eurostat projections). Over the next decades, this is expected to increase to 49.9 million by 2070. With a GDP of €26.1 thousand PPS per capita it is below the EU average GDP per capita of €29.6 thousand.

Health Status

In 2015, life expectancy at birth for men and women was, respectively, 80.1 years and 85.8 years and above the EU average (77.9 and 83.3 years respectively). Similarly, healthy life years at birth for both sexes are 64.1 years (women) and 63.9 years (men) significantly above the EU-average (63.3 and 62.6 respectively). The percentage of the Spanish population having a long-standing illness or health problem is lower than in the EU as a whole (In 2015, 32.9% and 34.2% respectively). The percentage of the population indicating a self-perceived severe limitation in its daily activities has decreased since 2006, and is significantly lower than the EU-average (5.2% against 8.1% in 2015).

Dependency trends

The share of dependents in Spain is set to increase from 5.3% in 2016 to 7.2% of the total population in 2070, an increase of 36%. This is higher than the EU-average increase of 21%. From less than 2.5 million residents living with strong limitations due to health problems in 2016, an increase of 46% is envisaged until 2070 to 3.58 million. That is a much steeper increase than in the EU as a whole (25%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is steadily increasing. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of 1.3 pps of

GDP to about 2.2 pps of GDP by 2070⁽⁵⁹⁴⁾. The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 3.5 pps taking expenditure to 4.4 pps of GDP by 2070.

Overall, for Spain, no significant short-term risks of fiscal stress arise. Risks appear, on the contrary, to be high in the medium term from a debt sustainability analysis perspective due to the stock of debt being still high at the end of projection (2028). High fiscal risks are expected in the long-run⁽⁵⁹⁵⁾.

System Characteristics⁽⁵⁹⁶⁾

It is arguable that the first long-term care system as such in Spain was established in 2007, with the approval of the Law 39/2006 Ley de Promoción de la Autonomía Personal y Atención a las Personas en situación de Dependencia (Law of Promotion of the Autonomy and Care of People in a Dependent Situation, LAPAD), which established the System for Autonomy and Care for Dependency (SAAD).

Prior to Law 39/2006 of December 2006, LTC care was provided through the basic social services of regions and municipalities, and by programmes towards people with disability benefits. This provision only partly met the LTC needs of the population. The Social Security system provided benefits for individuals with severe levels of disability as well as allowances through the non-contributory disability pension and family benefits for parents of disabled children.

It is estimated that only around 12% of elderly dependants received any kind of support that was publicly financed in 2000. The role of the public sector was secondary, provided only in cases where informal care was not possible or insufficient and the level of support depended on the economic capacity of the recipient. Furthermore, competences for social services had

⁽⁵⁹⁴⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁵⁹⁵⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁵⁹⁶⁾ This section draws on OECD (2011b) and ASISP (2014).

been decentralised to regional and local level, so important differences existed across territories.

The SAAD was created in 2007 in line with the LAPAD with the objective of promoting personal autonomy and ensuring the necessary attention and protection of all dependants in Spain, through the necessary collaboration of all public administration levels. A gradual calendar of implementation to cover all existing dependants was established with an original end-date of 2015, later to be delayed.

Within the SAAD, dependency is split into three different degrees of dependency: Degree I – moderate dependency; Degree II – severe dependency; and Degree III – high dependency. Each degree is in turn divided into two levels of increasing severity. During the progressive implementation period, only Degree III could apply during the 2007 (the first year), then Degree II level 2 in 2008, Degree II level 1 in 2009-2010 and finally moderate dependants (Degree I) in 2011-2012 (level 2) and 2013-2014 (level 1) would follow. However, as explained above, this plan was delayed later.

Managing the SAAD is, as for the previous LTC service provision, the competence of the regional Governments. As a consequence, many differences in its application can be observed across the different regions. Whereas 2.0% of population is recognised as being dependent in Spain, the ratio across regions varies from 2.7% in Andalucía and Cantabria, to only 1.4% in Navarra, 1.3% in the Comunitat Valenciana and only 1.1% in Canarias.

According to SAAD statistics, in July 2016 in Spain there were 1.21 million dependants. Specifically, 366,764 people were recognised as high dependents (30%), 454,751 as severe dependents (37%) and the rest (391,407, 32%) as moderate dependents. In total, 837,321 are receiving benefits, while the other 375,601 (31%) are on the waiting list.

On average each beneficiary receives 1.24 benefits (including in-kind and cash benefits), although this figure varies across regions. In terms of provision, the most important benefit is the cash benefit for home care. According to the July 2016 SAAD statistics, 357,984 recipients (34.6% of the services provided) are receiving it. The incidence of in-kind benefits is relatively lower: residential care made

up 14.4% of services provided, home care represented 15.8%, tele-care was 14.6% and day care centres 8.45%.

Public spending on LTC⁽⁵⁹⁷⁾ reached 0.9%⁽⁵⁹⁸⁾ of GDP in 2016 in Spain, below the EU average of 1.6 % of GDP. 21.1% of public LTC spending is done via cash benefits, close to the EU average of 20%.

In Spain, 63.2% of the estimated total dependants are receiving formal in-kind LTC services or cash benefits for LTC, above the EU average of 50%. Overall, 3.3% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 81.7% of public in-kind expenditure (EU: 61%), 10.9% being spent for LTC services provided at home (EU: 33.7%). Thus, relative to other Member States Spain has a focus on institutional care, which may be inefficient, as institutional care is relatively costly with respect to other types of care.

Administrative organisation

The system is funded through taxation and financed by funds from the central government and regions. The central government then allocates funds to each region based on the number of dependents, their degree of disability and the level of assistance they require. Regions can decide whether to allocate additional funding to provide additional services.

Types of care

As mentioned in the previous section, the benefits provided include a range of in-kind and cash

⁽⁵⁹⁷⁾ Long-term care benefits can be disaggregated into health-related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

⁽⁵⁹⁸⁾ It should be noted that the definition of LTC expenditure used for these expenditure variables differs from the definition used for the Ageing Report 2015.

benefits. A list is provided in Chapter 15 of the LAPAD, which details a wide range of services to be carried out through a social services public network of social services under the control controlled of the regional governments to be subsidised by the public sector.

Services include tele-care, home care, personal care help, residential care and day as well as night residential services. These services are provided by a network of public institutions of regional governments, local organisations, state reference centres and licensed private providers. Cash benefits are granted based on the recipient's degree of dependency and their economic means. According to the LAPAD, they include a home care cash benefit and a cash benefit for personal assistance.

1) Allowance for the care recipient to hire services. This allowance enables the care recipient to contract services from private licensed providers when the public sector is not able to provide this. Benefit levels range from €400/month for degree II level 1, to €31 for degree III, level 2, in 2012 for those who already have an assessed degree and level, and for new recipients from August 2012 it goes from €300.00 for grade I to €15.07 for grade III.

2) Allowance for informal care. The informal carer needs to be a relative of the care recipient, although if services are not available in the area, the informal carer can be a resident of the same (or neighbouring) municipality. The allowance compensates to some extent the service provided by the informal carer. Benefit levels range from 255.77 Euros/month for degree II level 1, to €42.59 for degree III, level 2, in 2012 those who already have a recognised degree and level, and for new recipients from August 2012 is from €153.00 for grade I to €87.64 for grade III.

3) Allowance for personal assistance. This allowance enables recipients individuals with a high degree of disability (Group III) to hire personal help to improve their personal autonomy, access to work/ education as well as to provide help with daily activities. A contract has to be provided and the carer needs to have appropriate professional qualifications. Benefit levels range from €609 /month for degree III level 1, to 812 for degree III level 2, in 2012 those who already have

a recognised degree and level, and for new recipients from August 2012 is from €300.00 for grade I to €15.07 for grade III.

Home-care provision includes prevention and promotion of personal autonomy, help with personal care and with instrumental activities of daily living. All persons below the minimum income threshold are automatically guaranteed home care.

Institutional LTC service providers include regional and municipal centres as well as private sector institutions. Providers are required to have minimum ratios of workers per care recipient and by type of worker for carers and geriatricians. Most institutions are private with only 24% of residences being publicly-owned (although 22% additional residents receive a public subsidy to be placed in a private centre). Providers often receive substantial government subsidies in order to make their service more affordable for recipients. There are large regional disparities in the distribution of beds and services offered as well as in term of their prices.

Day care centres are also largely private (65%) but are publicly subsidised at 60% and have seen large increases in the past (there were 36,000 new places between 2002 and 2007).

Eligibility criteria

Spain applies means-tested criteria, for both in-kind and cash benefits. In addition, users are not given a choice between cash and in-kind benefits nor can they accumulate them, and they do not have a discretionary use of cash benefits.

Benefits are universal and cover all Spanish nationals or those who have been residents of Spain for at least 5 years (of which at least the last 2 before filing the claim need to have been spent in Spain). Eligibility is determined through an assessment of the degree of dependency, evaluated on the basis of the Scale of Dependency (Established in the Royal Decree 740/2011). As mentioned before, there are three degrees of disability, with 2 sub-levels within each grade. They are defined as follows:

- Degree I (Moderate Disability): the individual requires help for several basic activities of

daily living at least once a day, or needs help on a sporadic basis or limited to personal autonomy.

- Degree II (Severe Disability): the individual needs help for several activities of daily living, two or three times a day but does not need permanent help from a carer nor extensive help to ensure personal autonomy.
- Degree III (High dependency): the individual needs help for several activities of daily living several times per day, and because of total loss of physical, mental, intellectual or sensorial autonomy, s/he needs permanent help from a carer or needs generalised help to ensure personal autonomy.

The assessment is expressed as a numerical score according to the eligibility scale, and individuals with a score below 25 are not entitled to public services or allowances.

Again, the responsibility for the assessment belongs to the regions. Once an individual has been assessed as being in need of care, an individual plan is prepared by the social services, including a list of appropriate services for the level of disability and dependency, as well as entitlement to allowances, in line with the legislation (Royal decree 1051/2013).

Co-payments, out of the pocket expenses and private insurance

All the potential recipients below a specified minimum income are guaranteed provision home care. Cost-sharing by recipients for the benefits they receive is determined according to their economic status up to a maximum of 90% of the service cost.

For all other services allowances are means-tested and the remainder needs to be paid by the care recipient or their relatives.

Role of the private sector

As explained in previous sections, the private sector is involved in the provision of several types of care. In institutional care it is the main provider,

although often benefitting from subsidies meant to increase the affordability of services to recipients.

Formal/informal caregiving

At present there is no allowance directly directed to family carers as the care allowance that exists currently is provided to the care recipient. Informal carers can benefit from pension rights and other social contributions if they subscribe a special agreement with the Social Security body. Assisting informal carers through training and provision of information is one of the objectives of the SAAD, and common standards were adopted in 2009.

All formal workers are required to hold relevant professional qualifications including carers in residential institutions, home carers, personal assistants as well as the directors of institutions.

Since 2015 professional profiles are determined as well as the duties to be performed and they are based on qualifications that need to be demonstrated by the appropriate Vocational Training Diplomas or Professional Certificate.

Since this Resolution there have been some calls by the regional authorities for guarantees on the expertise of these professionals, in order to certify that their qualifications fulfil the necessary requirements.

From the beginning of 2007 to the end of 2013, the number of long term care formal workers has increased by approximately 50.9%, with 116,507 new members being registered as working in the Social Security records.

Prevention and rehabilitation policies/measures

Some prevention services do exist and are subsidised. Home-care services also include prevention and promotion of personal autonomy.

Recently legislated and/or planned policy reforms

The Territorial Council of Social Services and of the System for the Autonomy and Care of Dependent Persons (SAAD) is a cooperation body where the Central Government, the Autonomous Regions and the Local Government are

represented. In its session of 10 July 2012, it has approved measures to improve the System and make it more transparent, with better quality, improved care of dependent persons, and also to guarantee its current and future financial sustainability, with criteria that guarantee equality in the granting of the benefits throughout Spain, and with impact on employment, respecting the principles set down in the Dependency Act. These measures are applicable in the Autonomous Regions.

The Resolutions of said Territorial Council where measures were approved have been expressed by the Government in the following general legislation for the whole of Spain and applicable by the Autonomous Regions in each one of its territories:

- Royal Decree-Law 20/2012, modifying Act 39/2006, of 14 December, on the Promotion of Personal Autonomy and Care of people in situation of dependency. This regulation abolishes the classification by levels within each degree of dependency, since it lengthened the procedure and consumed added resources without giving rise to any differentiation in terms of the benefits acknowledged. It also established a calendar for grade I to 1 July 2015, to give priority care to people with greater degree of dependency and it established the maximum amounts of the financial benefits for each of the degrees of dependency.
- Decision of 23 April 2013, of the State Secretariat for Social Services and Equality, publishes the Resolution of the Territorial Council of Social Services and of the System for the Autonomy and Care of Dependent Persons regarding criteria, recommendations and minimum conditions for the preparation of Plans for Prevention of Situations of Dependency and the Promotion of Personal Autonomy, which includes a Catalogue of reference of social services. With the purpose of preventing the appearance or worsening of diseases or disabilities and their after-effects, by the coordinated development, between social and health services, of actions to promote healthy living conditions, specific preventive and rehabilitation programs aimed at the elderly and disabled people and those who are affected by complex hospitalisation processes.
- Decision of 25 July 2013, of the State Secretariat for Social Services and Equality, publishes the Resolution on common criteria, recommendations and minimum conditions of the comprehensive care plans for children under the age of three in situations of dependency or at risk in application of Act 39/2006, of 14 December, on the Promotion of Personal Autonomy and Care of people in situation of dependency. The aim and purpose of this resolution is to promote their personal autonomy, so that they can enhance their capacity for development and wellbeing, enabling their inclusion in the family, school and social spheres. These Comprehensive Plans shall be developed by the Autonomous Regions and are aimed at children under the age of three certified to be in situation of dependency or at risk of developing it. They also consider the necessary strategies aimed at facilitating the support and participation of the family, guardians and/or carers, as well as the specific characteristics of the environment.
- Royal Decree 1050/2013, of 27 December 2013, governing the minimum level of protection established in Promotion of Personal Autonomy and Care of Persons in a Situation of Dependence Act 39/2006, of 14 December 2006.
- Royal Decree 1051/2013, of 27 December 2013, governing the provisions of the System for the Autonomy and Care of Dependent Persons, as established in the Promotion of Personal Autonomy and Care of Persons in a Situation of Dependence Act 39/2006, of 14 December 2006.
- Order SSI/2371/2013, of 17 December, regulating the Information System of the System for the Autonomy and Care of Dependent Persons (SISAAD), which defines the set of data necessary for the payment of the minimum level in addition to those that are necessary for management, statistics and studies.

All this new legislation seeks to clarify, make more transparent the Information System, to ensure their safety and to check and compare the data entered into the system by Regional Communities, and that these data are equal and homogeneous.

On the other hand, the above regulations and commitments culminate and consolidate the measures adopted by the Territorial Council. Other improvements are not foreseen in the dependency system, making possible to keep the SAAD with higher quality and a better professional care.

Challenges

Spain has taken significant steps to establish a social care system that provides coverage to the population. The main challenges of the system appear to be:

- **Improving the governance framework:** To establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities with respect to the provision of long-term care services; To set the public and private financing mix and organise formal workforce supply to face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; To strategically integrate medical and social services via such a legal framework; To define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; To establish good information platforms for LTC users and providers; To set guidelines to steer decision-making at local level or by practising providers; To share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes.
- **Improving financing arrangements:** To foster pre-funding elements, which implies setting aside some funds to pay for future obligations; To explore the potential of private LTC insurance as a supplementary financing tool; To determine the extent of user cost-sharing on LTC benefits.
- **Providing adequate levels of care to those in need of care:** To adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the breadth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the depth of coverage, that is, setting the types of services included into the coverage; To reduce the risk of impoverishment of recipients and informal carers.
- **Encouraging home care:** To develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; To monitor and evaluate alternative services, including incentives for use of alternative settings.
- **Encouraging independent living:** To provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care.
- **Supporting family carers:** To establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Ensuring coordination and continuity of care:** To establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-

ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.

- **Facilitating appropriate utilisation across health and long-term care:** To create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; to steer LTC users towards appropriate settings.
- **Changing payment incentives for providers:** To consider a focused use of budgets negotiated ex-ante or based on a pre-fixed share of high-need users.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.26.1: Statistical Annex – Spain

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	931	1,008	1,081	1,116	1,079	1,081	1,070	1,040	1,026	1,038	1,080	12,451	13,213	13,559	14,447
GDP per capita, PPS	25.9	27.1	27.5	26.5	24.7	24.4	24.2	24.2	23.9	24.8	26.1	26.8	28.1	28.0	29.6
Population, in millions	43.3	44.0	44.8	45.7	46.2	46.5	46.7	46.8	46.7	46.5	46.4	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.2	1.2	1.2
Per capita PPS	114.0	131.1	138.6	140.9	157.4	169.4	162.3	161.1	156.1	159.1	178.4	264.1	283.2	352.1	373.6
As % of total government expenditure	1.3	1.4	1.4	1.3	1.4	1.6	1.5	1.4	1.5	1.5	1.6	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	83.6	84.4	84.4	84.6	85.0	85.5	85.6	85.5	86.1	86.2	85.8	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.0	77.8	77.9	78.3	78.8	79.2	79.5	79.5	80.2	80.4	80.1	76.6	77.3	77.7	77.9
Healthy life years at birth for females	63.4	63.5	63.2	63.7	62.1	63.8	65.6	65.8	63.9	65.0	64.1	62.0	62.1	61.5	63.3
Healthy life years at birth for males	63.3	63.9	63.5	64.0	63.1	64.5	65.4	64.8	64.7	65.0	63.9	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	23.7	25.1	29.8	30.3	29.5	23.0	26.2	31.6	29.8	32.9	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	8.5	9.1	5.4	5.7	5.4	4.7	5.1	5.4	5.4	5.2	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	180	208	235	262	267	272	307	315	322	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	181	258	334	411	419	427	693	715	736	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	0.8	1.0	1.2	1.4	1.5	1.5	2.1	2.2	2.3	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	280	385	423	427	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	322	340	338	336	346	357	374	392	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.26.2: Statistical Annex - continued – Spain

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	46.4	46.6	47.2	48.3	49.3	49.6	49.9	7%	2%
Dependency									
Number of dependents in millions	2.45	2.58	2.89	3.28	3.65	3.81	3.58	46%	25%
Share of dependents, in %	5.3	5.5	6.1	6.8	7.4	7.7	7.2	36%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	1.0	1.2	1.5	1.9	2.2	2.2	135%	73%
AWG risk scenario	0.9	1.1	1.4	2.0	2.9	3.8	4.4	368%	170%
Coverage									
Number of people receiving care in an institution	328,249	357,938	402,335	490,157	609,580	726,096	758,963	131%	72%
Number of people receiving care at home	737,020	825,520	971,897	1,248,164	1,616,774	1,944,626	1,986,735	170%	86%
Number of people receiving cash benefits	483,844	535,970	619,983	774,274	976,656	1,166,259	1,216,095	151%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.3	3.7	4.2	5.2	6.5	7.7	7.9	138%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	63.2	66.7	69.1	76.6	87.7	100.0	100.0	58%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	79.5	79.5	79.0	79.6	80.3	79.7	78.9	-1%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	20.5	20.5	21.0	20.4	19.7	20.3	21.1	3%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	77.0	76.7	76.0	75.3	74.9	74.9	75.5	-2%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	23.0	23.3	24.0	24.7	25.1	25.1	24.5	6%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	81.7	82.7	82.9	88.0	92.9	90.7	86.8	6%	10%
Unit costs of home care per recipient, as % of GDP per capita	10.9	10.9	10.8	11.3	11.7	11.3	10.8	-1%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	18.5	18.6	18.8	18.9	19.0	19.2	19.2	4%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.27. SWEDEN

General context: Expenditure, fiscal sustainability and demographic trends

Sweden had a population of almost 9.9 million inhabitants in 2016, which is expected to reach 13.9 million in 2070. This is a 40% increase that is contrast with the 2% overall increase in the EU over this period. With a GDP of 33,700 PPS per capita in 2015, it is above the EU average of 29,600 PPS per capita.

Health status

In 2015, life expectancy at birth for both men and women was respectively 80.4 years and 84.1 years, above the EU average (77.9 and 83.3 years, respectively). Even more so, the healthy life years at birth for both sexes were 74.0 years (women) and 73.8 years (men) and substantially higher than the EU-average (63.3 and 62.6, respectively). At the same time the percentage of the Swedish population having a long-standing illness or health problem was slightly higher than in the EU as a whole (35.9% and 34.2%, respectively). The percentage of the population indicating a self-perceived severe limitation in its daily activities has been decreasing in the last few years, and was far lower than the EU-average (3.7% against 8.1%).

Dependency trends

The amount of people that depend on others to carry out activities of daily living increases significantly over the coming 50 years⁽⁵⁹⁹⁾. From around 510 thousand residents living with strong limitations due to health problems in 2016, an increase of 63% is envisaged until 2070 to 840 thousand. That is a steeper increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 5.2% to 6.0%, an increase of 17%. This is nevertheless less than the EU-average increase of 21%.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a

percentage of GDP is steadily increasing, from 3.2 percent in 2016, to 4.9 percent in 2070 in the "AWG reference scenario", corresponding to a 63% increase, about double the same increase as the EU. In the "AWG risk scenario", expenditure is projected to grow from 3.2 to 5.7, attaining a differential of 77%, lower than the EU average of 170%.

Fiscal sustainability risks appear to be low in Sweden over the low, medium and long-term⁽⁶⁰⁰⁾.

System Characteristics⁽⁶⁰¹⁾

According to the Social Services Act (1982), Swedish older people have the right to claim public service and help to support themselves in their day-to-day existence "if their needs cannot be met in any other way". The Swedish system of LTC is under the responsibility of municipalities and is mainly financed from local taxation. According to 2016 Eurostat data, some 7% of the total cost of LTC (including both social and health-related LTC) is financed through co-payments and charges, while the rest is covered by public funds, mainly through local taxes. Around 10% of the local authorities' total funding (not only LTC) comes from central government grants. Some 5% of the total cost of LTC is financed through co-payments and charges, while the rest is covered by public funds, mainly through local taxes with some 10-12% funding coming from central government grants to municipalities.

Public spending on LTC⁽⁶⁰²⁾ reached 3.2% of GDP in 2016, above the average EU level of 1.6% of GDP. 99.9% of the benefits were in-kind, while 0.1% were cash-benefits (EU: 84.4 vs 15.6%).

In the EU, 50% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 100% much higher in Sweden. Overall, 5.4% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.6%). On the one hand, low shares of coverage

⁽⁵⁹⁹⁾ The 2018 Ageing Report: https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

⁽⁶⁰⁰⁾ Fiscal sustainability Report (2018), Institutional Paper 094, January 2019, European Commission.

⁽⁶⁰¹⁾ This section draws on WHO/Europe (2012), Fukushima et al (2010), OECD (2011b) and ASISP (2014).

⁽⁶⁰²⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

may indicate a situation of under-provision of LTC services. On the other hand, higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional (in-kind) services makes up 66.1% of public in-kind expenditure (EU: 66.3%), 33.9% being spent for LTC services provided at home (EU: 33.7%).

Administrative organisation

At central government level, the Ministry of Health and Social Affairs (Socialdepartementet) is responsible for developing legislation on health care, social insurance and social issues. These laws and regulations are the basis for the planning, funding and provision of LTC services through the cooperation of 20 county councils and 290 municipalities. The central government is in constant dialogue with the Swedish Association of Local Authorities and Regions (SALAR), a co-operative national organisation that represents all county councils and municipalities.

County councils and municipalities are highly autonomous with respect to central government. Both have elected assemblies and have the right to levy and collect taxes. County councils and municipalities can, within the limits established in legislation, decide what level of priority they will assign to the elderly versus other age groups. The fact that LTC is mainly funded by local taxation underlines the independence of the local authorities from national government.

County councils are responsible for providing healthcare (whether through family doctors, hospitals, health centres, or other providers). Municipalities offer a number of social services to assist elderly living at home, including home help services, daytime community activities, etc. With the 1992 reform municipalities were also handed responsibility over local nursing homes and other forms of institutional LTC. In contrast, the responsibility for health care belongs to the county councils. In local nursing homes the municipalities are by law responsible for providing home health care including all medical staff and excluding doctors only. Over the years, all county councils and municipalities, except the municipalities within Stockholm county, have formed agreements

on transferring the responsibility for home health care also in all ordinary homes from the county councils to the municipalities. This has led to a more coherent organisation. However, county councils are still responsible for patients until they are discharged from hospital. The responsibility of medical care and rehabilitation for elderly in ordinary homes is shared between municipalities and county councils. This places high demands on the coordination of care between municipalities and county councils. Lack of coordination may lead to an inefficient use of resources, cooperation issues and lack of continuity as well as attempts by county councils and municipalities to transfer both responsibilities and costs to one another.

From 1 January 2010, local authorities have to draw up an individualised care plan for each recipient. The care plan states clearly each step of the required services and treatment. The plan also identifies the official in charge of the case and specifies which authority is responsible for which component of the services and care provided.

Types of care

The primary LTC service is home care, comprising help with daily activities such as shopping, cooking, cleaning and laundry. It also includes personal care, such as help with bathing, going to the toilet, getting dressed and getting in and out of bed.

As well as home care, the following LTC services are also available in Sweden: institutional care, day care, home nursing care, meal services, home adaptation and personal safety alarms. There are also transportation services for care recipients who are unable to use public transport. In addition, the local authorities also provide non-means tested grants to assist the disabled to use their homes in an efficient manner (Fukushima, 2010).

Eligibility criteria

Permanent residents who suffer from some degree of dependency are eligible for care, determined only by an assessment of their need for care. There is therefore no means-testing criterion applied to the provision of long-term care. Need for care is either assessed by a general practitioner or through a request for assessment by the relevant local authority. For direct requests to the authority, the

potential recipient as well as any eventual relatives are interviewed by an evaluator in order to determine the extent of support required, and whether the care can be provided in recipient's own home or not.

Nowadays, even relatively severe dependency cases needing extensive medical care can be treated in the home of the recipient. Home help is offered in flexible hours, in some cases including up to seven visits per day or more. In some cases, however, home care will not be advisable (for instance due to the inadequacy of the home) and institutional care will be considered as a last resort policy. In June 2018 the Government passed a new legislation on Assisted Security Housing to the parliament. The purpose of the new legislation is to encourage local municipalities to design special housing for elderly so it will better meet the needs of elderly people who need only lighter support but who no longer feel safe to stay in their own homes. The National Board of Health and Welfare (NBHW) introduced a standardised instrument for needs assessment in 2012. The tool for needs assessment is based on the International Classification of Functioning, Disability and Health (ICF) standard. The government have commissioned the NBHW to implement the new tool and financially supported activities such as training of process-leaders. In cases where citizens disagree with the care-manager's decisions, they can appeal to an administrative court. The number of successful appeals is very low, but the right to appeal is perceived as providing personal security to individuals.

Co-payments, out of the pocket expenses and private insurance

Cost-sharing for LTC services is set according to the Social Services Act with the aim of protecting recipients from excessive fees. A ceiling fee is set annually by the government, representing the maximum amount that a recipient can be charged. This ceiling is set without means-testing in principle, although it may be reduced if the recipient's monthly income is below the minimum cost of living as defined by the government (also on an annual basis).

Within these rules, each municipality will determine their own schedule of cost-sharing fees

for recipients. In 2006⁽⁶⁰³⁾, around 19% of recipients of home care did not pay any fees, as their income was below the threshold.

There are no private insurances for the cost of LTC in Sweden, so care is financed exclusively from taxation, cost-sharing and other out-of-pocket payments.

Role of the private sector

Municipalities and county councils can decide on how to organise the provision of LTC, including collaboration with different providers. Institutional and home care may be provided either by a municipality or a private provider (which can include private companies but also trusts and co-operatives). However, even when care is actually provided by the private sector, municipalities and county councils still have the exclusive responsibility for ensuring financing, provision and ensuring an adequate level of quality.

The introduction of choice for the individual is by far the main driving force behind the expansion of privately run (but publicly financed) institutions. Another reason has been the assumption that competition will be good for quality, effectiveness and the career possibilities for the mainly female staff in elderly care.

Formal/informal caregiving

Municipalities are required by law (since 1 July 2009) to provide support to informal carers. According to the Social Services Act, municipalities need to respect and cooperate with informal carers, offering support tailored to their needs. The aim is to alleviate the workload of carers and its impact on their health status, as well as providing them with necessary information and knowledge. The Act also aims to provide recognition of the work provided by carers and acknowledge its importance.

In accordance with the above, support for informal carers takes different forms. Carers have the right in some circumstances to take leave from their work in order to provide care for a terminally ill relative.

⁽⁶⁰³⁾ Fukushima et al, 2010.

Municipalities also provide support groups or centres for carers, which can be a source of mutual support. Municipalities can provide "Respite leave", giving carers temporary leave from their caring responsibilities, with the latter being taken over by home care providers or charities over that period (provided for free in about 50% of municipalities, in others a small charge is required) or by institutional providers on a temporary basis.

In addition, there are different services that provide informal carers with advice, including one-on-one sessions, websites and assistance from volunteers. Some municipalities also organise services for carers, including spa treatments, massage and health consultations ⁽⁶⁰⁴⁾.

Prevention and rehabilitation policies/measures

Prevention is dealt with by the public health system in Sweden.

Recently legislated and/or planned policy reforms

The Act on System of Choice in the Public Sector

In order to stimulate a greater variety of LTC providers and increase the quality of services provided, the government introduced a new law in 2009, the "Act of System of Choice in the Public Sector". Its aim is to make it easier for a variety of commercial providers to enter the market of service and care for the elderly. The law works as a voluntary tool for those municipalities who want to let recipients choose suppliers, and to expose public sector providers to competition from the private sector. The law is an alternative to the Swedish Public Procurement Act (2007:1091).

In July 2016, the Government introduced government grants for arranging and providing housing for older people. The purpose of the grants is to encourage renovation of existing residential properties for elderly people and the construction of new ones, as well as covering modifications to properties in order to enable older people to remain in their homes through improved accessibility and safety. SEK 150 million was allocated for this

purpose in 2016, SEK 300 million in 2017 and from 2018 SEK 400 million is allocated on a yearly basis. The Parliament decided in April 2018 to adopt the government's proposal for a new law on Housing adjustment contributions. The new legislation entered into force in July 2018 and aims at providing housing for disabled people giving them the opportunity to live an independent life in their own housing.

The government has introduced increased license requirements and special rules for procurement in the welfare sector, including home help services for elderly. The legislation aims at ensuring that private performers have sufficient prerequisites for conducting business with good quality and another goal is to strengthen the confidence in the sector. The proposals are also considered to simplify both procuring authorities and suppliers and promoting NGO's participation in procurement. The new legislation will enter into force in January 2019.

A new provision has been introduced in the Social Services Act which makes it possible for local Social Services Committee to offer home services to older people without an individual need assessment. The purpose is to provide local municipalities with the opportunity to grant older women and men home help services in an easier way and with greater scope for participation and self-determination from the user's perspective.

Dignity – National set of values for elderly care

The national set of values for the elderly is expressed in the Social Services Act (2001:453) since 2010. The Social Services Act also clarifies that the elderly should be given increased opportunities for influence on the social services.

The national set of values basically means that care services for the elderly should focus on enabling elderly to live with dignity and to experience well-being. This means among other things that the elderly care services should uphold and respect everyone's right to privacy and bodily integrity, autonomy, participation and personalisation.

Health and social care should help the individual to feel safe and experience meaningfulness. Services within elderly care must be of good quality.

⁽⁶⁰⁴⁾ Fukushima et al. (2010).

Older people should have influence over when and how services should be carried out.

The right for older couples to continue to live together

Today spouses can choose to continue to live together even when only one of the spouses is in need of care in special housing. The right came into force in 2012 after an amendment to the Social Services Act.

Government grant to support increased staffing

A sufficient level of staffing is recognised by the government as a crucial part of quality in elderly care. It is important to create safety and quality to the elderly, as well as good working conditions for the staff. A government grant to the municipalities of seven billion SEK under the period 2015-2018, has increased the number of staff working closest to the elderly. The staff is supposed to have relevant education or should be offered introduction and at work education. The grant will be offered provided that this is approved by the Parliament.

Possible future changes

In June 2018 the Government reported to the Parliament its view on elderly care in Sweden (SKr. 2017/18: 280) and the work done to adapt the ageing population to demographic and technological development. The report also specifies the areas that should be prioritised during the forthcoming mandate period: A wider range of housing for the elderly, prevention and rehabilitation efforts, better interaction between health care, to create more attractive workplaces within social care for elderly with stronger professional proficiency, increased use of welfare technology and e-health, and the importance of gender equality and equal care.

Challenges

- **Improving the governance framework:** To face the growing number of dependents, and provide a strategy to deliver high-performing long-term care services to face the growing demand for LTC services; To strategically integrate medical and social services.

- **Encouraging independent living:** To provide effective home care, ITC and information to recipients, as well as improving home and general living environment design.
- **Ensuring availability of formal carers:** To determine current and future needs for qualified human resources and facilities for long-term care; to seek options to increase the productivity of LTC workers.
- **Ensuring coordination and continuity of care:** To establish better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** To arrange for adequate supply of services and support outside hospitals, and financial incentives to discourage acute care use for LTC; to create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; to steer LTC users towards appropriate settings.
- **Improving value for money:** To invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** To promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.27.1: Statistical Annex – Sweden

GENERAL CONTEXT															
GDP and Population	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP, in billion euro, current prices	313	335	356	352	310	369	405	423	436	433	449	12,451	13,213	13,559	14,447
GDP per capita, PPS	32.3	34.0	35.7	34.2	30.5	31.8	32.6	33.0	32.5	32.6	33.7	26.8	28.1	28.0	29.6
Population, in millions	9.0	9.0	9.1	9.2	9.3	9.3	9.4	9.5	9.6	9.6	9.7	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	0.6	0.6	0.6	0.6	0.7	0.6	2.6	2.7	2.7	2.7	2.7	1.1	1.2	1.2	1.2
Per capita PPS	178.3	192.5	202.5	201.7	197.9	195.3	845.5	883.3	872.3	895.9	936.8	264.1	283.2	352.1	373.6
As % of total government expenditure	1.2	1.2	1.2	1.2	1.2	1.2	5.1	5.2	5.2	5.2	5.4	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	82.9	83.1	83.1	83.3	83.5	83.6	83.8	83.6	83.8	84.2	84.1	82.6	83.1	83.3	83.3
Life expectancy at birth for males	78.5	78.8	79.0	79.2	79.4	79.6	79.9	79.9	80.2	80.4	80.4	76.6	77.3	77.7	77.9
Healthy life years at birth for females	63.2	67.5	66.8	69.0	69.6	66.4	65.5	:	66.0	73.6	73.8	62.0	62.1	61.5	63.3
Healthy life years at birth for males	64.5	67.3	67.7	69.4	70.7	67.0	67.0	:	66.9	73.6	74.0	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	35.2	34.8	33.9	32.8	31.5	32.9	34.7	36.0	36.1	35.9	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	8.2	7.8	9.0	8.0	8.4	8.1	:	7.7	3.8	3.7	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
Coverage (Based on data from Ageing Reports)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Number of people receiving care in an institution, in thousands	:	:	97	140	184	227	230	232	87	88	88	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	222	223	224	225	227	229	206	208	210	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	3.5	4.0	4.4	4.8	4.8	4.9	3.1	3.1	3.1	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	200	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	224	224	222	217	221	222	224	226	232	238	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.27.2: Statistical Annex - continued – Sweden

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	9.9	10.3	11.3	12.0	12.7	13.3	13.9	40%	2%
Dependency									
Number of dependents in millions	0.51	0.54	0.63	0.69	0.74	0.79	0.84	63%	25%
Share of dependents, in %	5.2	5.2	5.6	5.7	5.8	5.9	6.0	17%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	3.2	3.3	3.8	4.1	4.3	4.7	4.9	53%	73%
AWG risk scenario	3.2	3.3	3.9	4.3	4.6	5.2	5.7	77%	170%
Coverage									
Number of people receiving care in an institution	103,250	108,902	138,178	162,395	180,020	202,835	221,755	115%	72%
Number of people receiving care at home	198,257	210,468	262,970	298,636	328,861	363,352	395,261	99%	86%
Number of people receiving cash benefits	237,142	251,338	312,939	357,550	391,771	436,048	472,961	99%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	5.4	5.5	6.3	6.8	7.1	7.5	7.9	45%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0	:	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	99.9	99.9	99.9	99.9	99.9	99.9	99.9	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	8%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	66.1	66.0	66.2	66.9	67.0	67.4	67.5	2%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	33.9	34.0	33.8	33.1	33.0	32.6	32.5	-4%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	204.3	204.5	205.2	204.3	204.9	207.9	208.4	2%	10%
Unit costs of home care per recipient, as % of GDP per capita	54.7	54.6	55.1	54.9	55.2	56.1	56.2	3%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	0.2	0.2	0.2	0.2	0.2	0.2	0.2	16%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

3.28. UNITED KINGDOM

General context: Expenditure, fiscal sustainability and demographic trends

In 2016, the United Kingdom had a population of around 65.6 million inhabitants, which is roughly 13.0% of the EU population⁽⁶⁰⁵⁾. With a GDP of around €2,602 billion, or 29,112 PPS per capita, it is slightly below the EU average GDP per capita of €29,610. Public expenditure on long-term care (health)⁽⁶⁰⁶⁾ is 1.2% GDP, slightly higher than EU average in the previous years (around 1% in 2012). During the coming decades the population of the UK is set to increase, from 65.6 million inhabitants in 2016 to 81 million inhabitants in 2070. This 24% increase is well above the EU average change of 2%.

Health status

Life expectancy at birth for both women and men was, in 2015, 82.8 and 79.2 years, respectively below and above the EU average (83.3 and 77.9 years for women and men). Healthy life years at birth were 63.3 years for women and 63.7 years for men, again above the EU-average for males (63.3 and 62.6 respectively in 2015). The percentage of the UK population having a long-standing illness or health problem is above the EU average with 35.3% vs. 34.2% in 2015. Also the percentage of the population indicating a self-perceived severe limitation in its daily activities is above the EU-average (10.6% against 8.1% in 2015).

Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming decades. From 6.67 million residents living with strong limitations due to health problems in 2015, an increase of 47% is envisaged until 2070 to around 9.84 million. That is a steeper increase than in the EU as a whole (EU 25%). Also as a share of the population, the dependents are projected to become a bigger group, going from 10.2% to 12.1% by 2070, with

an increase of 19%, which is however lower than the EU average of 21% over the same period.

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is projected to steadily increase. In the "AWG reference scenario", public long-term care expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.3 pps of GDP by 2070⁽⁶⁰⁷⁾. The "AWG risk scenario", which also captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 1.8 pps of GDP by 2070. Overall, the projected long-term care expenditure increase is expected to add to budgetary pressure. Fiscal sustainability risks as captured by S1 are medium over the medium term, linked to the current high level of government debt and projected ageing costs. Overall, given the high risks to debt sustainability, fiscal sustainability risks over the medium-term are high. In the long term, the UK appears to face high fiscal sustainability risks, also related to projected ageing costs⁽⁶⁰⁸⁾.

System Characteristics

Public spending on long-term care in the UK reached 1.2% of GDP in 2015, in line with the EU average for the same year (1.2%). Around 75% of total long-term care public spending was spent on in-kind benefits in 2016 (EU average 84.4%) with 25% being spent on cash-benefits (EU average 15.6%)⁽⁶⁰⁹⁾.

In the United Kingdom, 52.3% of dependents are receiving formal in-kind long-term care services or cash benefits for long-term care (EU average 50% in 2016). Overall, 5.3% of the population receive

⁽⁶⁰⁵⁾ Based on Eurostat projections.

⁽⁶⁰⁶⁾ Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with tasks linked with Activities with Daily Living).

⁽⁶⁰⁷⁾ The 2018 Ageing Report:

https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

⁽⁶⁰⁸⁾ European Commission, Fiscal Sustainability Report (2018) https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

⁽⁶⁰⁹⁾ The 2018 Ageing Report.

formal long-term care in-kind and/or cash benefits, which is above the EU average of 4.6% ⁽⁶¹⁰⁾. However higher coverage rates may imply an increased fiscal pressure on government budgets, possibly calling for greater needs of policy reform.

The expenditure for institutional services makes up 56.8% of public in-kind expenditure (EU: 66.3% in 2016), 43.2% being spent for long-term care services provided at home in the same year. The United Kingdom appears to be more focussed on home care than the average (EU 33.7%), which may be more efficient, as institutional care is relatively costly with respect to other types of care. While the share of expenditure on institutional care is relatively low, unit costs of this type of provision, measured as a share of GDP per capita, appear to be above average, pointing to scope to further rationalise spending in this area. Lower than average unit costs for the provision of cash benefits also suggest that this area could be strengthened with potential gains from a cost-efficiency perspective, subject to a rational allocation and well-regulated use of additional resources.

The United Kingdom has a devolved long-term care system where Wales, England, Scotland and Northern Ireland manage their systems separately. Considering that 83% of the United Kingdom's elderly reside in England, the majority of service use and expenditure relates to England, even though the elderly are not the only source of long-term care expenditure ⁽⁶¹¹⁾. A large part of the fiscal responsibility for long-term care used to lie with the individual, but there is also considerable public support for the financing of long-term care and the provision of services ⁽⁶¹²⁾. In Scotland, a contribution of £177 a week to a care provider is available to anyone assessed as needing personal care services, and is not means tested. Additional payments are available to people needing nursing care. This is known as 'free personal care', though doesn't cover the full cost of care for most and is only available in certain circumstances ⁽⁶¹³⁾. The

Department of Health, Social Services and Public Safety in Northern Ireland has recently carried out a consultation on adult social care reform ⁽⁶¹⁴⁾.

Administrative organisation

Unlike health care in England and Wales, adult social care is strictly means-tested by local authorities. In Scotland care is provided free to everyone in need ⁽⁶¹⁵⁾, while Northern Ireland is considering the introduction of free care.

Types of care

Home care: Domiciliary care otherwise known as home care helps people who are frail or who have support needs live independently in their own homes. Personal assistants visit people to provide practical support with tasks including washing and getting dressed. People may also need other help with other practical household tasks. Those who believe they have care needs are entitled to a care assessment from their local authority. If the person has eligible needs the council will carry out a financial assessment to establish whether the person is entitled to help with the cost of their care.

Residential care homes: Most care homes, are privately run. Local authorities can commission care from either private care homes or their own facilities. There are three types of institutional care in the United Kingdom, residential care homes, nursing homes and reablement beds in a hospital.

Private Sector

According to the OECD Fact Sheet, May 2011 most services are provided by the private sector however, in the private services have clients which are separated in two distinct categories. Publicly funded clients and privately funded clients. Since the majority of the clients are classified as publicly funded clients this means that the private sector is financed to a great extent by the public sector.

⁽⁶¹⁰⁾ The 2018 Ageing Report.

⁽⁶¹¹⁾ Working age population with chronic conditions, including learning disabilities, represent an important source of non-age-related spending.

⁽⁶¹²⁾ OECD Fact Sheet, (May 2011).

⁽⁶¹³⁾ For additional details on this topic see <https://www2.gov.scot/Topics/Health/Support-Social-Care/Support/Adult-Social-Care/Free-Personal-Nursing-Care>, accessed May 3, 2019.

⁽⁶¹⁴⁾ For further details see <http://www.dhsspsni.gov.uk/showconsultations?txtid=58501>, accessed Oct. 18, 2013.

⁽⁶¹⁵⁾ Further information about the Scottish system is available at <http://www.scotland.gov.uk/Topics/Health/Support-Social-Care/Support/Older-People/Free-Personal-Nursing-Care>, accessed October 18, 2013.

Eligibility criteria, co-payments, out of the pocket expenses and private insurance

Local authorities receive a finite amount of funding from central Government but may also raise their own revenue through business rates and council tax. They determine how to distribute and set budgets for expenditure on adult social care. Funding comes from a combination of central taxation (formula and specific grant to local authorities-block grants), local taxation (council tax and business rates) and depending on local authority means test user charges for social care services. The majority of central government grants received are not earmarked for particular services and local authorities can decide how to allocate the overall budget to various public services including social care services.

Health services provided under the National Health Service (NHS) are free at the point of delivery, irrespective of the financial means of the user. As mentioned above, social care services arranged by local authorities attract user charges depending on the user's financial means. Whether or not a person qualifies for any financial support towards their care costs depends on the level of their assets. Local authorities provide means-tested financial help to pay for care and support where a person cannot afford the cost themselves. The financial assessment takes into account what a person can afford from both their income and their assets, for example savings or property. If a person has above the capital limit of £23,250 they pay the full costs of their care and support. If their assets are below the lower capital limit of £14,250, they pay what they can afford from income only. Anyone who falls between the capital limits will be expected to pay what they can afford from income plus a means tested contribution from assets. The value of a person's house is not included in the means test if they receive care at home, or if they enter a care home but a spouse or qualifying relative still lives at the house. These terms are known as means test disregards.

In response to the Royal Commission, the Government funds a part of the nursing home fees that is meant to reflect the nursing input in the care

provided. In the United Kingdom, private long-term care insurance is minimal ⁽⁶¹⁶⁾.

Some people over the age of 18 with a 'primary health need' may be eligible for NHS Continuing Healthcare (CHC), a package of care that is arranged and funded solely by the NHS for people not in hospital.

CHC eligibility is not determined by age or clinical condition, but we know that the majority of those qualifying are the oldest in society with debilitating conditions such as dementia, or younger people with serious debilitating conditions such as spinal injury.

Individuals may receive CHC funding for any setting, including their own home or a care home.

If found to be eligible for CHC in an individual's own home, the NHS will pay for healthcare (e.g. services from a community nurse or specialist therapist) and associated social care needs (e.g. personal care and domestic tasks - help with bathing, dressing, food preparation and shopping).

In a care home, the NHS also pays for care home fees, including board and accommodation.

If an individual is not assessed as eligible for CHC but does have some nursing needs, and resides or needs to reside in a care home with nursing, they may be eligible for NHS-funded Nursing Care (FNC). If assessed as eligible, the relevant Clinical Commissioning Group will pay a flat rate payment to the care home to cover the reasonable costs of providing registered nursing care to FNC eligible residents.

Institutional care

In the United Kingdom, local authorities negotiate the fees that are paid to the providers of publicly subsidised residential care and home-care services. As local authorities are in many areas the main purchaser of care from local providers, they have considerable market power to negotiate fees at relatively low levels. Traditional models of residential and domiciliary care still dominate today's market. However over the last 30 years, the market has shifted from a focus on care homes

⁽⁶¹⁶⁾ OECD Fact Sheet, May 2011.

to more care provided at home. This is partly driven by a policy shift towards maintaining people's independence at home and in the community. The Competition and Markets Authority (CMA) published its market study into residential care homes for over 65s in the UK in November 2017. The scope of the market study was to understand 'why the care home market may not be working well for residents and their families and to develop proposals to make it better'. The report estimated that fees paid by local authorities to care home providers could be on average up to 10% below total cost, on the basis of historical fees data and analysis. The report concluded that this could present challenges to the longer term stability of the care market. Prevention and rehabilitation policies/measures.

Some services which are preventative or rehabilitative in nature are fully funded by the state.

Recently legislated and/or planned policy reforms

In 2014 the UK passed legislation which consolidated existing law in England into a single, unified, modern statute. The legislation focuses on promoting people's well-being by enabling them to prevent and postpone the need for long term care and to pursue education, employment and other opportunities to realise their potential. The changes made include:

- introduction of a new national minimum eligibility criteria, which defines the minimum level of need for support an individual should be assessed as having before they are entitled to publicly funded care, rather than allowing this to be set at the discretion of local government; (from April 2015);
- informal carers will be treated as equal to the person they care for, including the same rights to assessment and broadened entitlements to publicly funded support (from April 2015);
- rebalancing the focus of services to promote wellbeing and prevention or delaying of needs in order to reduce dependency, rather than only intervening at crisis point; (from April 2015);

- a new offer that the state will defer the costs of residential care in return for a charge against the person's house, so that no-one will be forced to sell their home in their lifetime to pay for residential care (from April 2015).

The Government has committed to consult on options for reform of the social care sector, to put it on a more sustainable footing for the longer term.

Challenges

The UK has a relatively fragmented system of LTC, with above-average unit costs and average reliance on informal care. As it stands, the main challenges of the system appear to be:

- **Improving the governance framework:** to define a comprehensive approach covering both policies for informal (family and friends) carers, and policies on the formal provision of LTC services and its financing; to establish good information platforms for LTC users and providers; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation; to share data within government administrations to facilitate the management of potential interactions between LTC financing, targeted personal-income tax measures and transfers (e.g. pensions), and existing social-assistance or housing subsidy programmes; to deal with cost-shifting incentives across health and care.
- **Improving financing arrangements:** to foster pre-funding elements, which implies setting aside some funds to pay for future obligations.
- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits; and the scope of coverage, that is, setting the types of services included into the coverage, to reduce the risk of impoverishment of recipients and informal carers.
- **Ensuring availability of formal carers:** to determine current and future needs for

qualified human resources and facilities for long-term care; to improve recruitment efforts, including through the migration of LTC workers and the extension of recruitment pools of workers; to increase the retention of successfully recruited LTC workers, by further improving the pay and working conditions of the LTC workforce building on the horizontal improvements brought about for all categories by the National Living Wage, training opportunities, more responsibilities on-the-job, feedback support and supervision, to seek options to increase the productivity of LTC workers.

- **Supporting family carers:** to further the efforts on establishing policies for supporting informal carers, as envisaged by the future carers strategy, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.
- **Encouraging independent living:** to provide effective home care, tele-care and information to recipients, as well as improving home and general living environment design.
- **Ensuring coordination and continuity of care:** to further the efforts towards better co-ordination of care pathways and along the care continuum, such as through a single point of access to information, the allocation of care co-ordination responsibilities to providers or to care managers, via dedicated governance structures for care co-ordination and the integration of health and care to facilitate care co-ordination.
- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; to create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people

or circulated through the system; to steer LTC users towards appropriate settings.

- **Improving value for money:** to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co-ordination between health and care services; to invest in ICT as an important source of information, care management and coordination.
- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.28.1: Statistical Annex –United Kingdom

GENERAL CONTEXT															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP and Population															
GDP, in billion euro, current prices	2,027	2,147	2,245	1,975	1,717	1,842	1,884	2,078	2,064	2,279	2,602	12,451	13,213	13,559	14,447
GDP per capita, PPS	30.9	31.1	30.8	29.5	26.7	27.4	27.1	27.5	27.4	27.9	29.1	26.8	28.1	28.0	29.6
Population, in millions	60.2	60.6	61.1	61.6	62.0	62.5	63.0	63.5	63.9	64.4	64.9	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	:	:	:	:	1.2	1.2	1.2	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	334.5	339.5	355.0	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	:	:	:	:	2.8	2.7	2.8	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	81.3	81.6	81.8	81.8	82.4	82.6	83.0	82.8	82.9	83.2	82.8	82.6	83.1	83.3	83.3
Life expectancy at birth for males	77.0	77.3	77.6	77.7	78.3	78.6	79.0	79.1	79.2	79.5	79.2	76.6	77.3	77.7	77.9
Healthy life years at birth for females	65.5	64.9	66.0	66.3	66.1	65.6	65.2	64.5	64.8	64.2	63.3	62.0	62.1	61.5	63.3
Healthy life years at birth for males	64.2	64.8	64.6	65.0	65.0	64.9	65.2	64.6	64.4	63.4	63.7	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	38.0	35.8	33.9	35.8	34.5	36.0	32.9	32.5	34.4	35.3	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	9.2	9.0	8.8	9.6	9.2	9.1	10.6	10.2	10.5	10.6	8.3	8.3	8.7	8.1
SYSTEM CHARACTERISTICS															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Coverage (Based on data from Ageing Reports)															
Number of people receiving care in an institution, in thousands	:	:	318	288	259	230	234	238	243	246	249	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	847	899	951	1,003	1,017	1,032	1,020	1,030	1,040	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	5,550	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.28.2: Statistical Annex - continued – United Kingdom

PROJECTIONS									
	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population									
Population projection in millions	65.6	67.5	71.8	75.2	77.7	79.4	81.0	24%	2%
Dependency									
Number of dependents in millions	6.67	6.97	7.78	8.49	9.09	9.45	9.84	47%	25%
Share of dependents, in %	10.2	10.3	10.8	11.3	11.7	11.9	12.1	19%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	1.5	1.6	1.8	2.1	2.4	2.6	2.8	83%	73%
AWG risk scenario	1.5	1.6	1.9	2.2	2.6	3.0	3.3	120%	170%
Coverage									
Number of people receiving care in an institution	644,163	685,067	831,859	1,008,108	1,182,738	1,302,625	1,389,748	116%	72%
Number of people receiving care at home	1,242,964	1,321,712	1,584,020	1,859,854	2,122,156	2,284,079	2,437,852	96%	86%
Number of people receiving cash benefits	1,604,522	1,699,848	2,015,483	2,349,049	2,664,252	2,869,875	3,049,085	90%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	5.3	5.5	6.2	6.9	7.7	8.1	8.5	59%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	52.3	53.2	56.9	61.5	65.7	68.3	69.9	34%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	97.7	97.7	97.7	97.8	97.8	97.9	97.9	0%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	2.3	2.3	2.3	2.2	2.2	2.1	2.1	-10%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	56.8	56.8	57.1	57.8	58.3	58.9	58.9	4%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	43.2	43.2	42.9	42.2	41.7	41.1	41.1	-5%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	85.1	85.0	87.4	89.2	89.4	91.0	92.7	9%	10%
Unit costs of home care per recipient, as % of GDP per capita	33.5	33.5	34.6	35.3	35.6	36.2	36.9	10%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	1.4	1.4	1.5	1.5	1.5	1.5	1.5	8%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

ANNEX

Health care – data sources by indicator

GDP	Data sources
GDP, in billion Euro, current prices	Eurostat
GDP per capita PPS (thousands)	Ameco
Real GDP growth (% year-on-year) per capita	Eurostat
Real total health expenditure growth (% year-on-year) per capita	Eurostat
Expenditure on health*	Data sources
Total as % of GDP	Eurostat and WHO
Total current as % of GDP	Eurostat, OECD and WHO
Total capital investment as % of GDP	Eurostat, OECD and WHO
Total current per capita PPS	Eurostat, OECD, WHO and AMECO
Public as % of GDP	Eurostat, OECD and WHO
Public current as % of GDP	Eurostat and OECD
Public current per capita PPS	Eurostat, OECD and AMECO
Public capital investment as % of GDP	Eurostat, OECD and WHO
Public as % total expenditure on health	Eurostat, OECD and WHO
Public expenditure on health in % of total government expenditure	Eurostat
Proportion of the population covered by public or primary private health insurance	OECD
Out-of-pocket expenditure on health as % of total expenditure on health	Eurostat and WHO
Note: *Including also expenditure on medical long-term care component, as reported in standard international databases, such as in the System of Health Accounts.	
Population and health status	Data sources
Population, current (millions)	Eurostat
Life expectancy at birth for females	Eurostat
Life expectancy at birth for males	Eurostat
Healthy life years at birth females	Eurostat
Healthy life years at birth males	Eurostat
Amenable mortality rates per 100 000 inhabitants*	Eurostat
Infant mortality rate per 1 000 live births	Eurostat
System characteristics	
Composition of total or public current expenditure as % of GDP and as % of total current health expenditure	Data sources
Inpatient curative and rehabilitative care	Eurostat, OECD and WHO
Day cases curative and rehabilitative care	Eurostat, OECD and WHO
Out-patient curative and rehabilitative care	Eurostat, OECD and WHO
Pharmaceuticals and other medical non-durables	Eurostat, OECD and WHO
Therapeutic appliances and other medical durables	Eurostat, OECD and WHO
Prevention and public health services	Eurostat, OECD and WHO
Health administration and health insurance	Eurostat, OECD and WHO
Expenditure drivers (technology, life style)	Data sources
MRI units per 100 000 inhabitants	Eurostat
Angiography units per 100 000 inhabitants	Eurostat
CTS per 100 000 inhabitants	Eurostat
PET scanners per 100 000 inhabitants	Eurostat
Proportion of the population that is obese	OECD
Proportion of the population that is a regular smoker	Eurostat and OECD
Alcohol consumption litres per capita	OECD and WHO
Providers	Data sources
Practising physicians per 100 000 inhabitants	Eurostat and OECD
Practising nurses per 100 000 inhabitants	Eurostat and OECD
General practitioners per 100 000 inhabitants	Eurostat and OECD
Acute hospital beds per 100 000 inhabitants	Eurostat, OECD and AMECO
Outputs	Data sources
Doctors consultations per capita	Eurostat and OECD
Hospital inpatient discharges per 100 inhabitants	Eurostat
Day cases discharges per 100 000 inhabitants	Eurostat
Acute care bed occupancy rates	Eurostat and WHO
Hospital curative average length of stay	Eurostat
Day cases as % of all hospital discharges	Eurostat and AMECO
Population and Expenditure projections	Data sources
Projected public expenditure on healthcare as % of GDP*	
AWG reference scenario	Ageing report 2018
AWG risk scenario	Ageing report 2018
Note: *Excluding expenditure on medical long-term care component.	
Population projections	
Population projections until 2070 (millions)	Ageing report 2018

Long-term care – data sources by indicator

Indicator	Data source
GDP and Population	
GDP, in billion euro, current prices	Eurostat
GDP per capita, PPS	Ameco
Population, in millions	Eurostat
Public expenditure on long-term care	
As % of GDP	Eurostat
Per capita PPS	Eurostat
As % of total government expenditure	Eurostat
Health status	
Life expectancy at birth, females	Eurostat
Life expectancy at birth, males	Eurostat
Healthy life years at birth, females	Eurostat
Healthy life years at birth, males	Eurostat
People having a long-standing illness or health problem, in % of pop.	Eurostat
People having self-perceived severe limitations in daily activities (% of pop.)	Eurostat
Coverage (Based on data from Ageing Reports)	
Number of people receiving care in an institution (thousands)	Ageing Report 2018
Number of people receiving care at home (thousands)	Ageing Report 2018
% of pop. receiving formal LTC in-kind	Ageing Report 2018 and Eurostat
Providers	
Number of informal carers (thousands) (OECD)	OECD
Number of formal carers (thousands) (OECD)	OECD
Population	
Population projection in millions (Europop2013)	Eurostat
Dependency	
Number of dependents in millions (2015 Ageing Report)	Ageing Report 2018
Share of dependents (% , 2015 Ageing Report)	Ageing Report 2018
Projected public expenditure on LTC as % of GDP	
AWG reference scenario	Ageing Report 2018
AWG risk scenario	Ageing Report 2018
Coverage	
Number of people receiving care in an institution	Ageing Report 2018
Number of people receiving care at home	Ageing Report 2018
Number of people receiving cash benefits	Ageing Report 2018
% of pop. receiving formal LTC in-kind and/or cash benefits	Ageing Report 2018
% of dependents receiving formal LTC in-kind and/or cash benefits	Ageing Report 2018
Composition of public expenditure and unit costs	
Public spending on formal LTC in-kind as % of total public spending on LTC	Ageing Report 2018
Public spending on LTC related cash benefits as % of total public spending on LTC	Ageing Report 2018
Public spending on institutional care as % of total public spending on LTC in-kind	Ageing Report 2018
Public spending on home care as % of total public spending on LTC in-kind	Ageing Report 2018
Unit costs of institutional care per recipient, as % of GDP per capita	Ageing Report 2018
Unit costs of home care per recipient, as % of GDP per capita	Ageing Report 2018
Unit costs of cash benefits per recipient, as % of GDP per capita	Ageing Report 2018

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