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Health care systems

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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 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

([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.

([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.
([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 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

([257]) Note that this may be driven by the break in series after 2011 due to the shift to SHA 2011.

([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 pharmaceuticals 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 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 laboratories 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 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

([263]) http://www.legilux.public.lu/leg/a/archives/2010/0242/a242.pdf#page=2.

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			
GDP	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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*	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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 internation 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)	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	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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**

												EU- latest national data			
Composition of total as % of total current health expenditure	**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%

												EU- latest national data			
Expenditure drivers (technology, life style)	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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

													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**	**Luxembourg**	**EU**
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	1.2	0.9
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	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**	**Luxembourg**	**EU**
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	79.7	2.0

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

Luxembourg

Long-term care systems

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 (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

([539]) Introducing the concept of "Accueil gérontologique" (cf. http://www.legilux.public.lu/leg/a/archives/2004/0070/a070.pdf#page=2).

([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 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 3.18.1: **Statistical Annex – Luxembourg**

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	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

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	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

Population	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
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).