Denmark

Health Care & Long-Term Care Systems

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Health care systems

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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 are, 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			
GDP	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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*	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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 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)	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	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 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
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	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
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)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data 2009	2011	2013	2015
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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
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. Denmark	EU
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	1.0	0.9
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	1.8	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 % Denmark	EU
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	19.6	2.0

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

Denmark

Long-term care systems

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

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	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

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	:	:	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

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