

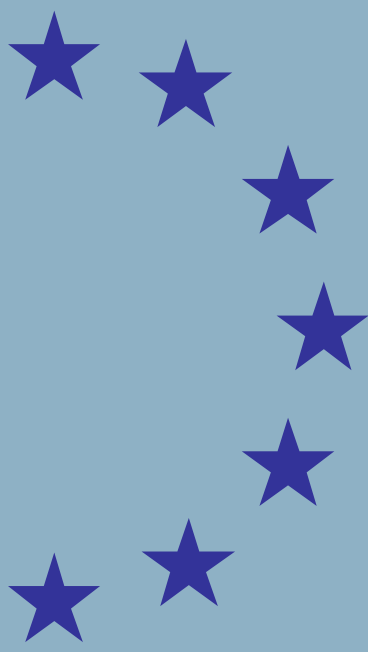


# Denmark

---

## Health Care & Long-Term Care Systems

An excerpt from  
the Joint Report on Health Care  
and Long-Term Care Systems  
& Fiscal Sustainability,  
published in October 2016  
as Institutional Paper 37  
Volume 2 - Country Documents



**Denmark**

---

Health care systems

## 1.7. DENMARK

### General context: Expenditure, fiscal sustainability and demographic trends

#### General statistics: GDP, GDP per capita; population

GDP per capita is currently well above EU average with 32,100 PPS in 2013 (EU: 27,900). The economic crisis hit Denmark relatively hard and resulted in a significant drop in employment. However, the economy has gained traction in 2013. Population was estimated at 5.6 million in 2013. It has been slowly increasing in past years. According to Eurostat 2013 projections, total population is projected to increase from around 5.6 million in 2013 to 6.5 million in 2060.

#### Total and public expenditure on health as % of GDP

Total expenditure on health as a percentage of GDP (10.6% in 2013) has increased over the last decade (from 9.5% in 2003), although down from a peak of 11.1% of GDP in 2010, and is above the EU average<sup>(83)</sup> of 10.1% in 2013. Throughout the last decade, public expenditure has increased as % of GDP: from 8.0% in 2003 to 9.1% of GDP in 2013 (EU: 7.8%). When expressed in per capita terms, total spending on health at 3,551 PPS was above the EU average of 2,988 in 2013. So was public spending on health care: 3,031 PPS vs. an EU average of 2,208 PPS in 2013.

#### Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.9 pps 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 1.9 pps of GDP from now until 2060 (EU: 1.6).<sup>(84)</sup> Overall, projected health care expenditure increase is expected to add to budgetary pressure. However,

currently no sustainability risks appear for Denmark over the long run. This risk-free outlook derives primarily from a relatively limited unfavourable contribution of the initial budgetary position and from the different contributions to age-related public spending balancing each other out in the long-term.<sup>(85)</sup>

#### Health status

Life expectancy at birth (82.4 years for women and 78.3 years for men) is around the EU averages of 83.1 and 77.6 years in 2013. With 59.1 years for women and 60 years for men, healthy life years are below the averages in the EU (61.8 and 61.6, for women and men).<sup>(86)</sup> The infant mortality rate of 3.5‰ is below the EU average of 3.9‰ in 2013.

As for the lifestyle of the Danish population, the data indicates an average number of regular smokers (17% in 2013), being below the EU average of 22%, having declined in the past years. The proportion of the obese population was below EU level at 13.4% in 2010 (EU: 15.5% in 2013), 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.

#### 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

<sup>(83)</sup> 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.

<sup>(84)</sup> The 2015 Ageing Report: [http://europa.eu/epc/pdf/ageing\\_report\\_2015\\_en.pdf](http://europa.eu/epc/pdf/ageing_report_2015_en.pdf)

<sup>(85)</sup> Fiscal Sustainability Report 2015: [http://ec.europa.eu/economy\\_finance/publications/eeip/pdf/ip018\\_en.pdf](http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip018_en.pdf)

<sup>(86)</sup> 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.

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*

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

In 2013, private expenditure and out-of-pocket expenditure were 14.6% and 12.8% of total health expenditure, below the EU averages (22.6% and 14.3%).

#### *Types of providers, referral systems and patient choice*

Primary care is provided by general practitioners (GPs) working in private 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 2012, there were 362 practising physicians per 100 000 inhabitants, compared to 344 in EU in 2013. The number of general practitioners is below the EU average (69 per 100 000 inhabitants vs. 78 in the EU). The number of nurses per 100 000 inhabitants (1,630 in 2009) is much above the EU average of 837. 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 2010, the number of acute care beds was 287 compared to 356 per 100 000 inhabitants in the EU in 2013. 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 (15.4 discharges in Denmark versus 13.5 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.

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

#### *eHealth, Electronic Health Record*

Under the National IT Strategy for the Danish Health Care Service authorities have been introducing a number of ICT and eHealth 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.

#### *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 for serious illness and 2 months for less severe disease. The Government has introduced a bill for a new right to assessment and identification of needs and to treatment. If the capacity of the public hospital cannot ensure that a given treatment or assessment can be initiated within 1 month, patients will have the right to extended free choice of hospital. The new right is expected to take effect on 1 October 2016.
- **Massive prioritising of the psychiatry.** The parliament has agreed to invest 2.2 billion DDK 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.
- **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 will set ambitious goals for the quality of the Danish health care in spring 2016. The national goals will set a framework for the continuous improvement of quality and efficiency. The national goals will be supported

by a number of local goals and activities, which shall lead to local improvements. The national goals are 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 will present a cancer plan which aims at reducing interregional differences in treatment and outcomes and the national cancer mortality rate. Moreover, the government will present a national plan targeting elderly patients. The plan will aim to improve the general conditions for the patients and reduce 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. Finally, 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.

### Challenges

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

- To continue increasing the efficiency of health care spending, promoting quality and integrated patient packages as well as a focusing on productivity and costs in view of the relatively high spending on health care as a share of GDP and increasing health care expenditure over the coming decades, due to

population ageing and non-demographic factors.

- To continue strengthening the integrated health care system, such that general practitioners, municipalities and hospitals work closely together to give citizens a coordinated package of treatment.
- To implement and monitor the effectiveness of the plans to foster quality and access to psychiatric care, while ensuring the high value for money for current investments.
- To implement the reform on transparency of results to inform best practice and contribute to faster diagnosis, treatment and care of the best quality.
- To continue the consolidation of the administrative reform and the new decision-making structure that resulted from it, ensuring coherence of responsibilities.
- To continue to focus on a balanced mix of skills in all parts of the health sector, for instance for nurses to handle tasks in private practice and acute wards, and on a clear referral system, to ensure an effective use of resources.



Table 1.7.1: Statistical Annex – Denmark

General context												EU- latest national data		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2009	2011	2013
GDP, in billion Euro, current prices	193	202	213	226	233	241	230	242	246	253	255	9289	9800	9934
GDP per capita PPS (thousands)	31.3	32.5	32.3	33.5	33.9	33.1	30.8	31.9	32.4	32.3	32.1	26.8	28.0	27.9
Real GDP growth (% year-on-year) per capita	0.1	2.1	2.1	3.1	1.2	-1.4	-6.2	0.9	0.7	-0.7	0.0	-4.8	1.4	-0.1
Real total health expenditure growth (% year-on-year) per capita	8.2	3.8	3.2	4.7	1.9	0.5	5.7	-2.5	-1.2	0.3	-3.3	3.2	-0.2	-0.4

Expenditure on health*												2009	2011	2013
Total as % of GDP	9.5	9.7	9.8	9.9	10.0	10.2	11.5	11.1	10.9	11.0	10.6	10.4	10.1	10.1
Total current as % of GDP	9.1	9.3	9.3	9.5	9.6	9.8	11.0	10.7	10.5	10.6	10.4	9.8	9.6	9.7
Total capital investment as % of GDP	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.6	0.5	0.5
Total per capita PPS	2491	2654	2819	3026	3139	3288	3511	3543	3527	3645	3551	2828	2911	2995
Public as % of GDP	8.0	8.2	8.3	8.4	8.4	8.6	9.8	9.4	9.3	9.4	9.1	8.1	7.8	7.8
Public current as % of GDP	7.7	7.7	7.8	7.9	8.0	8.2	9.3	9.0	8.9	9.0	8.8	7.9	7.7	7.7
Public per capita PPS	1957	2066	2196	2345	2452	2587	2772	2825	3008	3127	3031	2079	2218	2208
Public capital investment as % of GDP	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.1
Public as % total expenditure on health	84.5	84.3	84.4	84.7	84.4	84.7	85.1	85.1	85.3	85.8	85.4	77.6	77.2	77.4
Public expenditure on health in % of total government expenditure	12.9	13.0	13.6	14.1	14.8	15.0	15.1	14.6	14.4	14.5	:	14.8	14.9	:
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	99.7	99.7	98.7
Out-of-pocket expenditure on health as % of total expenditure on health	14.6	14.9	14.7	14.5	14.6	14.1	13.7	13.7	13.3	12.9	12.8	14.1	14.4	14.1

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

Population and health status												2009	2011	2013
Population, current (millions)	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.6	502.1	504.5	506.6
Life expectancy at birth for females	79.8	80.2	80.5	80.7	80.6	81.0	81.1	81.4	81.9	82.1	82.4	82.6	83.1	83.3
Life expectancy at birth for males	75.0	75.4	76.0	76.1	76.2	76.5	76.9	77.2	77.8	78.1	78.3	76.6	77.3	77.8
Healthy life years at birth females	60.9	69.0	68.4	67.2	67.4	60.8	60.4	61.4	59.4	61.4	59.1	:	62.1	61.5
Healthy life years at birth males	63.0	68.3	68.4	67.7	67.4	62.4	61.8	62.3	63.6	60.6	60.4	:	61.7	61.4
Amenable mortality rates per 100 000 inhabitants*	80	76	72	71	63	60	58	:	119	115	:	64.4	128.4	:
Infant mortality rate per 1 000 life births	4.4	4.4	4.4	3.5	4.0	4.0	3.1	3.4	3.5	3.4	3.5	4.2	3.9	3.9

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data		
Composition of total current expenditure as % of GDP												2009	2011	2013
Inpatient curative and rehabilitative care	2.55	2.58	2.62	2.69	2.72	2.86	3.24	3.12	3.02	3.03	2.89	3.13	2.99	3.01
Day cases curative and rehabilitative care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	:	:	0.18	0.18	0.19
Out-patient curative and rehabilitative care	2.43	2.47	2.50	2.54	2.50	2.58	2.93	2.82	2.94	3.04	3.02	2.29	2.25	2.24
Pharmaceuticals and other medical non-durables	0.84	0.83	0.80	0.82	0.85	0.81	0.84	0.82	0.73	0.69	0.70	1.60	1.55	1.44
Therapeutic appliances and other medical durables	0.39	0.40	0.39	0.40	0.40	0.40	0.43	0.40	0.38	0.38	:	0.31	0.31	0.32
Prevention and public health services	0.21	0.21	0.21	0.20	0.21	0.21	0.25	0.25	0.24	0.24	0.26	0.25	0.25	0.24
Health administration and health insurance	0.12	0.12	0.12	0.12	0.15	0.14	0.16	0.15	0.15	0.26	0.25	0.42	0.41	0.47

Composition of public current expenditure as % of GDP												2009	2011	2013
Inpatient curative and rehabilitative care	2.40	2.40	2.42	2.48	2.50	2.63	2.98	2.88	2.76	2.78	2.67	2.73	2.61	2.62
Day cases curative and rehabilitative care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	:	:	0.16	0.16	0.18
Out-patient curative and rehabilitative care	1.92	1.94	1.98	2.03	1.97	2.06	2.35	2.25	2.38	2.49	2.42	1.74	1.71	1.80
Pharmaceuticals and other medical non-durables	0.47	0.46	0.45	0.45	0.46	0.44	0.45	0.43	0.36	0.32	0.28	0.79	1.07	0.96
Therapeutic appliances and other medical durables	0.18	0.18	0.18	0.18	0.19	0.19	0.21	0.20	0.18	0.19	:	0.13	0.12	0.13
Prevention and public health services	0.21	0.21	0.20	0.19	0.20	0.20	0.24	0.24	0.23	0.23	0.25	0.25	0.20	0.19
Health administration and health insurance	0.09	0.09	0.09	0.09	0.12	0.11	0.12	0.12	0.11	0.21	0.21	0.11	0.27	0.27

Sources: EUROSTAT, OECD and WHO



Table 1.7.2: Statistical Annex - continued – Denmark

Composition of total as % of total current health expenditure	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	EU- latest national data			
												2009	2011	2013	
Inpatient curative and rehabilitative care	27.9%	27.9%	28.1%	28.5%	28.5%	29.3%	29.3%	29.2%	28.8%	28.6%	27.8%	31.8%	31.3%	31.1%	
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	:	:	1.8%	1.9%	1.9%	
Out-patient curative and rehabilitative care	26.6%	26.7%	26.8%	26.9%	26.2%	26.4%	26.5%	26.4%	28.1%	28.7%	29.1%	23.3%	23.5%	23.2%	
Pharmaceuticals and other medical non-durables	9.2%	9.0%	8.6%	8.7%	8.9%	8.3%	7.6%	7.7%	7.0%	6.5%	6.7%	16.3%	16.2%	14.9%	
Therapeutic appliances and other medical durables	4.3%	4.3%	4.2%	4.2%	4.2%	4.1%	3.9%	3.7%	3.6%	3.6%	:	3.2%	3.3%	3.3%	
Prevention and public health services	2.3%	2.3%	2.3%	2.1%	2.2%	2.1%	2.3%	2.3%	2.3%	2.3%	2.5%	2.6%	2.6%	2.5%	
Health administration and health insurance	1.3%	1.3%	1.3%	1.3%	1.6%	1.4%	1.4%	1.4%	1.4%	2.5%	2.4%	4.2%	4.3%	4.9%	
<b>Composition of public as % of public current health expenditure</b>															
Inpatient curative and rehabilitative care	31.3%	31.0%	31.0%	31.3%	31.2%	32.0%	31.9%	31.9%	31.1%	30.8%	30.4%	34.6%	34.1%	34.0%	
Day cases curative and rehabilitative care	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	:	:	2.0%	2.1%	2.3%	
Out-patient curative and rehabilitative care	25.1%	25.1%	25.4%	25.6%	24.6%	25.1%	25.2%	24.9%	26.8%	27.6%	27.6%	22.0%	22.3%	23.4%	
Pharmaceuticals and other medical non-durables	6.1%	6.0%	5.8%	5.7%	5.7%	5.4%	4.8%	4.8%	4.1%	3.5%	3.2%	10.0%	13.9%	12.5%	
Therapeutic appliances and other medical durables	2.3%	2.3%	2.3%	2.3%	2.4%	2.3%	2.3%	2.2%	2.0%	2.1%	:	1.6%	1.6%	1.6%	
Prevention and public health services	2.7%	2.7%	2.6%	2.4%	2.5%	2.4%	2.6%	2.7%	2.6%	2.5%	2.9%	3.2%	2.7%	2.5%	
Health administration and health insurance	1.2%	1.2%	1.2%	1.2%	1.5%	1.3%	1.3%	1.3%	1.2%	2.3%	2.3%	1.4%	3.5%	3.5%	
<b>Expenditure drivers (technology, life style)</b>															
MRI units per 100 000 inhabitants	0.91	1.02	:	:	:	:	1.54	:	:	:	:	1.0	1.1	1.0	
Angiography units per 100 000 inhabitants	:	:	:	:	:	:	:	:	:	:	:	0.9	0.9	0.8	
CTS per 100 000 inhabitants	1.4	1.4	1.4	1.6	1.8	2.1	2.4	2.8	2.9	:	3.8	1.8	1.7	1.6	
PET scanners per 100 000 inhabitants	:	0.2	0.4	0.4	0.4	0.5	0.6	:	0.5	:	0.6	0.1	0.1	0.1	
Proportion of the population that is obese	:	:	11.4	:	:	:	:	13.4	:	:	:	14.9	15.4	15.5	
Proportion of the population that is a regular smoker	28.0	26.0	26.0	25.0	24.0	23.0	19.0	20.9	:	:	17.0	23.2	22.4	22.0	
Alcohol consumption litres per capita	11.5	11.3	11.3	11.1	11.1	10.8	10.2	10.4	10.1	9.0	9.2	10.3	10.0	9.8	
<b>Providers</b>															
Practising physicians per 100 000 inhabitants	308	322	331	338	340	346	350	356	360	362	:	329	335	344	
Practising nurses per 100 000 inhabitants	1358	1399	1439	1448	1429	1489	1556	1586	1598	1630	:	840	812	837	
General practitioners per 100 000 inhabitants	:	:	:	:	:	:	68	68	69	69	:	:	78	78.3	
Acute hospital beds per 100 000 inhabitants	339	326	315	309	299	292	286	287	253	:	247	373	360	356	
<b>Outputs</b>															
Doctors consultations per capita	7.9	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.8	4.7	4.6	6.3	6.2	6.2	
Hospital inpatient discharges per 100 inhabitants	16.4	16.4	16.5	16.5	15.5	15.2	15.4	:	:	:	:	16.6	16.4	16.5	
Day cases discharges per 100 000 inhabitants	3,999	4,259	4,470	4,755	4,729	4,793	5,383	:	:	:	:	6368	6530	7031	
Acute care bed occupancy rates	:	:	:	:	:	:	:	:	:	:	:	72.0	73.1	70.2	
Hospital curative average length of stay	3.6	3.4	3.5	:	:	:	:	:	:	:	:	6.5	6.3	6.3	
Day cases as % of all hospital discharges	19.7	20.6	21.4	22.4	23.0	:	25.8	:	:	:	:	27.8	28.7	30.4	
<b>Population and Expenditure projections</b>															
Projected public expenditure on healthcare as % of GDP*	2013	2020	2030	2040	2050	2060	Change 2013 - 2060				EU Change 2013 - 2060				
AWG reference scenario	8.1	8.5	8.8	8.9	9.0	9.0	0.9				0.9				
AWG risk scenario	8.1	8.8	9.4	9.7	10.0	10.0	1.9				1.6				
Note: *Excluding expenditure on medical long-term care component.															
<b>Population projections</b>															
Population projections until 2060 (millions)	2013	2020	2030	2040	2050	2060	Change 2013 - 2060, in %				EU - Change 2013 - 2060, in %				
	5.6	5.8	6.1	6.3	6.4	6.5	16.5				3.1				

Sources: EUROSTAT, OECD and WHO

## Denmark

---

Long-term care systems

## 2.7. DENMARK

### General context: expenditure, sustainability and demographic trends

GDP per capita in PPS is at 32,100 and far above EU average of 27,900 in 2013. Denmark has a population of 5.6 million inhabitants, which is roughly 0.8% of the EU population. During the coming decennia the population will steadily grow, from 5.6 million inhabitants in 2013 to 6.5 million inhabitants in 2060. This 17% increase is much higher than the EU average of 3%.

### Health status

Life expectancy at birth for both women and men is respectively 82.4 years and 78.3 years in 2013 and is below the EU average for women and above the EU average for men (83.3 and 77.8 years, respectively). Healthy life years at birth are with 59.1 years (women) and 60.4 years (men) below the EU-averages (61.5 and 61.4, respectively). The percentage of the Danish population having a long-standing illness or health problem is slightly lower than in the Union (28.9% in Denmark versus 32.5% in the EU). The percentage of the population indicating a self-perceived severe limitation in its daily activities stands at 6.8%, which is lower than the EU-average (8.7%).

### Dependency trends

The number of people depending on others to carry out activities of daily living increases significantly over the coming 50 years. From 440 thousand residents living with strong limitations due to health problems in 2013, an increase of 36% is envisaged until 2060 to slightly more than 600 thousand. That is a slightly less steep increase than in the EU as a whole (40%). Also as a share of the population, the dependents are becoming a bigger group, from 7.9% to 9.2%, an increase of 17%. This is less than the EU-average increase of 36%.

### 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 2.3 pps of GDP by 2060. <sup>(363)</sup> The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 2.7 pps of GDP by 2060.

Overall, projected health care expenditure increase is expected to add to budgetary pressure. However, currently no sustainability risks appear for Denmark over the long run. This risk-free outlook derives primarily from a relatively limited unfavourable contribution of the initial budgetary position and from the different contributions to age-related public spending balancing each other out in the long-term. <sup>(364)</sup>

### 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 or 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 2013. 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.

Public spending on LTC reached 2.4% of GDP in 2013 in Denmark, above EU average of 1.6% of GDP. 2.3% of GDP were spent on in-kind benefits, while 0.1% of provided via cash-benefits. Most in

<sup>(363)</sup>The 2015 Ageing Report: [http://europa.eu/epc/pdf/ageing\\_report\\_2015\\_en.pdf](http://europa.eu/epc/pdf/ageing_report_2015_en.pdf).

<sup>(364)</sup>Fiscal Sustainability Report 2015: [http://ec.europa.eu/economy\\_finance/publications/eeip/pdf/ip018\\_en.pdf](http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip018_en.pdf).

-kind expenditure is covered by the public payer, as 91% of total LTC in-kind expenditure was public, and 9% private. Thus, private co-payments for formal in-kind LTC have a marginal role in financing.

In the EU, 53% of dependents are receiving formal in-kind LTC services or cash-benefits for LTC. This share is with 62% much higher in Denmark, which has one the highest coverage rates. Overall, 4.9% of the population (aged 15+) receive formal LTC in-kind and/or cash benefits (EU: 4.2%). 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 46% of public in-kind expenditure (EU: 61%), 54% being spent for LTC services provided at home (EU: 39%). 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 the social services for elderly and disabled people is to ensure that they can manage in their own homes. In cases where elderly or disabled people cannot manage 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 and 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 will set goals for the quality of the Danish health care in spring 2016. The national goals will set a framework for the continuous quality improvement. The national goals will be supported by a number of local goals and activities, which shall lead 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.
- **Coherent health care solutions.** Within the health budget framework, the Government has earmarked an amount of DKK 250 million for the regions and of DKK 300 million for the municipalities in 2014 to fund coherent health care solutions and targeted treatment where the health staff work together across disciplines and authority boundaries.
- **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.

### 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 2.7.1: Statistical Annex – Denmark

GENERAL CONTEXT																
GDP and Population	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	EU 2009	EU 2010	EU 2011	EU 2012	EU 2013
GDP, in billion euro, current prices	193	202	213	226	233	241	230	242	246	253	255	9,289	9,545	9,800	9,835	9,934
GDP per capita, PPS	31.3	32.5	32.3	33.5	33.9	33.1	30.8	31.9	32.4	32.3	32.1	26.8	27.6	28.0	28.1	27.9
Population, in millions	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.6	502	503	504	506	507
Public expenditure on long-term care																
As % of GDP	1.9	2.0	2.0	2.0	2.2	2.2	2.5	2.4	2.4	2.4	:	1.0	1.0	1.0	1.0	:
Per capita PPS	474.0	514.1	534.0	573.0	637.9	650.5	681.3	701.9	694.0	714.7	:	297.1	316.7	328.5	317.8	:
As % of total government expenditure	:	3.7	3.9	4.0	4.2	4.2	4.2	4.1	4.1	4.0	:	2.1	2.2	2.2	2.1	:
Note: Based on OECD, Eurostat - System of Health Accounts																
Health status																
Life expectancy at birth for females	79.8	80.2	80.5	80.7	80.6	81.0	81.1	81.4	81.9	82.1	82.4	82.6	82.8	83.1	83.1	83.3
Life expectancy at birth for males	75.0	75.4	76.0	76.1	76.2	76.5	76.9	77.2	77.8	78.1	78.3	76.6	76.9	77.3	77.4	77.8
Healthy life years at birth for females	60.9	69.0	68.4	67.2	67.4	60.8	60.4	61.4	59.4	61.4	59.1	:	62.6	62.1	62.1	61.5
Healthy life years at birth for males	63.0	68.3	68.4	67.7	67.4	62.4	61.8	62.3	63.6	60.6	60.4	:	61.8	61.7	61.5	61.4
People having a long-standing illness or health problem, in % of pop.	:	24.3	25.7	29.6	27.8	24.7	29.0	27.6	29.4	28.9	28.7	:	31.4	31.8	31.5	32.5
People having self-perceived severe limitations in daily activities (% of pop.)	:	:	:	:	:	7.5	7.7	7.8	7.7	6.8	6.8	:	8.1	8.3	8.6	8.7
SYSTEM CHARACTERISTICS																
Coverage (Based on data from Ageing Reports)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	EU 2009	EU 2010	EU 2011	EU 2012	EU 2013
Number of people receiving care in an institution, in thousands	:	:	:	:	123	106	89	72	73	74	44	3,433	3,771	3,851	3,931	4,183
Number of people receiving care at home, in thousands	:	:	:	:	73	96	119	142	143	145	101	6,442	7,296	7,444	7,569	6,700
% of pop. receiving formal LTC in-kind	:	:	:	:	3.6	3.7	3.8	3.9	3.9	3.9	2.6	2.0	2.2	2.2	2.3	2.1
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	15	15	16	19	18	20	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	73	75	78	77	76	77	79	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO



Table 2.7.2: Statistical Annex - continued – Denmark

PROJECTIONS								
	2013	2020	2030	2040	2050	2060	MS Change 2013-2060	EU Change 2013-2060
<b>Population</b>								
Population projection in millions	5.6	5.8	6.1	6.3	6.4	6.5	17%	3%
<b>Dependency</b>								
Number of dependents in millions	0.44	0.48	0.53	0.56	0.58	0.60	36%	40%
Share of dependents, in %	7.9	8.4	8.7	8.9	9.1	9.2	17%	36%
<b>Projected public expenditure on LTC as % of GDP</b>								
AWG reference scenario	2.4	2.7	3.3	3.9	4.2	4.5	83%	40%
AWG risk scenario	2.4	2.7	3.4	4.1	4.6	5.1	107%	149%
<b>Coverage</b>								
Number of people receiving care in an institution	44,207	50,628	64,937	77,611	87,103	94,585	114%	79%
Number of people receiving care at home	101,331	116,235	141,600	160,295	175,319	184,640	82%	78%
Number of people receiving cash benefits	128,609	145,759	177,194	202,166	221,069	234,593	82%	68%
% of pop. receiving formal LTC in-kind and/or cash benefits	4.9	5.4	6.3	7.0	7.5	7.9	61%	68%
% of dependents receiving formal LTC in-kind and/or cash benefits	61.7	64.6	72.8	78.9	82.8	85.2	38%	23%
<b>Composition of public expenditure and unit costs</b>								
Public spending on formal LTC in-kind ( % of tot. publ. spending LTC)	94.6	94.6	94.9	95.2	95.3	95.4	1%	1%
Public spending on LTC related cash benefits ( % of tot. publ. spending LTC)	5.4	5.4	5.1	4.8	4.7	4.6	-14%	-5%
Public spending on institutional care ( % of tot. publ. spending LTC)	46.1	46.0	46.3	47.3	47.5	48.1	4%	1%
Public spending on home care ( % of tot. publ. spending LTC in-kind)	53.9	54.0	53.7	52.7	52.5	51.9	-4%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	135.4	133.5	134.7	140.5	140.0	142.0	5%	-2%
Unit costs of home care per recipient, as % of GDP per capita	69.0	68.2	71.6	75.9	76.8	78.5	14%	-3%
Unit costs of cash benefits per recipient, as % of GDP per capita	5.8	5.8	5.8	5.8	5.8	5.8	0%	-2%

Source: Based on the European Commission (DG ECFIN)-EPC (AWG), "The 2015 Ageing Report – Economic and budgetary projections for the 28 EU Member States (2013-2060)".