



State of Health in the EU

Sweden

Country Health Profile 2017

The Country Health Profile series

The *State of Health in the EU* profiles provide a concise and policy-relevant overview of health and health systems in the EU Member States, emphasising the particular characteristics and challenges in each country. They are designed to support the efforts of Member States in their evidence-based policy making.

The Country Health Profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in cooperation with the European Commission. The team is grateful for the valuable comments and suggestions provided by Member States and the Health Systems and Policy Monitor network.

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Data and information sources

The data and information in these Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated in June 2017 to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD health database. Some additional data also come from the Institute for Health Metrics and Evaluation (IHME), the European Centre for Disease Prevention and Control (ECDC), the Health Behaviour in School-Aged Children (HBSC) surveys and the World Health Organization (WHO), as well as other national sources.

The calculated EU averages are weighted averages of the 28 Member States unless otherwise noted.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following StatLinks into your Internet browser:
<http://dx.doi.org/10.1787/888933593855>

Demographic and socioeconomic context in Sweden, 2015

		Sweden	EU
Demographic factors	Population size (thousands)	9 799	509 277
	Share of population over age 65 (%)	19.6	18.9
	Fertility rate ¹	1.9	1.6
Socioeconomic factors	GDP per capita (EUR PPP ²)	35 700	28 900
	Relative poverty rate ³ (%)	8.0	10.8
	Unemployment rate (%)	7.4	9.4

1. Number of children born per woman aged 15–49.

2. Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries.

3. Percentage of persons living with less than 50% of median equivalised disposable income.

Source: Eurostat Database.

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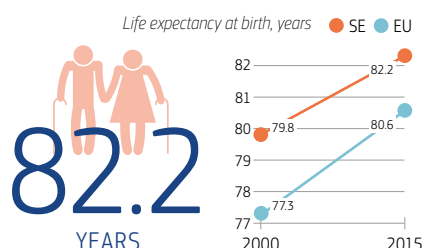
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1 Highlights

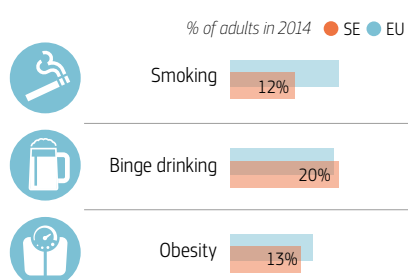
Life expectancy in Sweden is among the highest in the EU. Both men and women enjoy the highest healthy life expectancy at age 65 of all EU countries. The Swedish health system is characterised by large financial and human resources, but it faces challenges to strengthen care and coordination across providers and levels of care to better respond to the needs of population ageing.

Health status



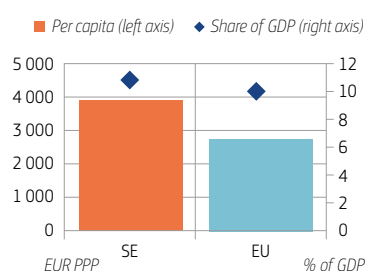
Life expectancy at birth was 82.2 years in 2015, up almost 2.5 years from 2000, 1.6 years above the EU average. Life expectancy gains have mainly been driven by reduced mortality rates after the age of 65. Stroke is decreasing as a cause of death, but a growing number of people are dying from Alzheimer's disease and other dementias.

Risk factors



Only 12% of adults in Sweden smoke daily, a decrease from 19% in 2000, and the lowest rate among all EU countries. Overall alcohol consumption per adult has increased and one-fifth of adults report heavy alcohol consumption on a regular basis. The obesity rate among adults has also increased but remains below the EU average. Many risk factors are more pronounced among people with low income and education, contributing to health inequalities.

Health system

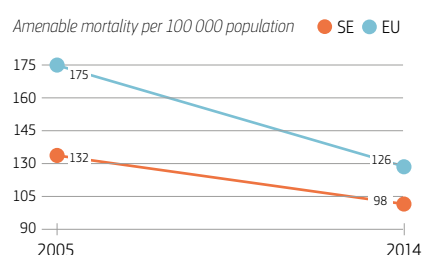


Sweden has the third highest health spending in the EU as a share of GDP (11.0% in 2015 compared to the EU average of 9.9%), and the fifth highest in per capita spending (EUR 3 932 compared to the EU average EUR 2 797). Public expenditure accounts for 84% of all health spending, a share which is also higher than the EU average (79%). Voluntary health insurance has a small but rapidly increasing role in funding health.

Health system performance

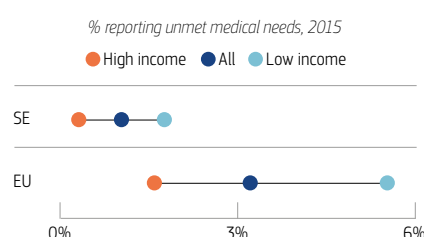
Effectiveness

Amenable mortality in Sweden remains below most other EU countries, indicating that the health care system is more effective in avoiding deaths from conditions largely treatable in modern health care.



Access

Although waiting times and care coordination continue to be issues, access to health care in Sweden is generally good, with low numbers reporting unmet needs for medical care and relatively little variation between income groups.



Resilience

Sweden has large numbers of doctors and nurses, although challenges persist to make the most efficient use of health workforce. For a long time, there has been a substantial shift of resources and activities from inpatient to outpatient (or ambulatory) care, although strengthening primary care remains a challenge.



2 Health in Sweden

Life expectancy is increasing and remains among the highest in the EU

Life expectancy at birth in Sweden increased by two and a half years from 2000–15, to 82.2 years (Figure 1). Swedish life expectancy is 1.6 years longer than the EU average and is the fifth highest across the EU.

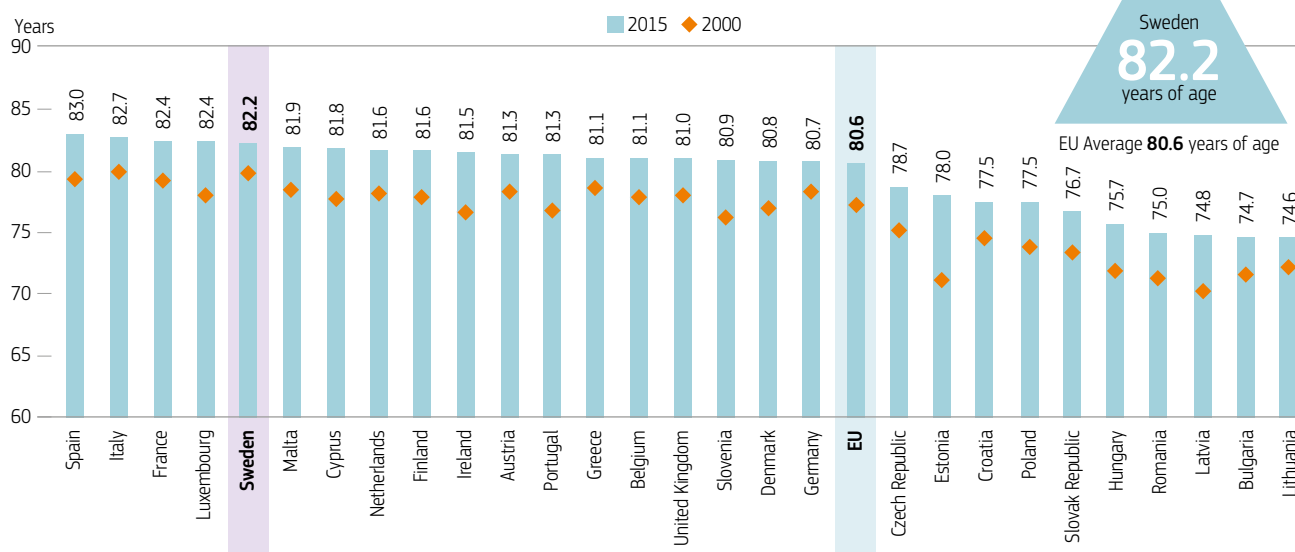
The gap in life expectancy between men and women is 3.7 years (80.4 years for men and 84.1 years for women), which is among the smallest in the EU. However, there is a sizeable gap in life expectancy between socioeconomic groups, particularly among men. Life expectancy at birth among Swedish men with university education is almost five years higher than among those who have not completed their secondary education.¹ This gap is a bit less pronounced among women (less than three years).

Most of the life expectancy gains in Sweden since 2000 have been driven by reduced mortality rates after the age of 65. Swedish women at this age can expect to live another 21.5 years in 2015 (up from 20.2 years in 2000) and Swedish men another 18.9 years (up from 16.7 years in 2000). The number of years spent in good health is high compared to other EU countries, with healthy life expectancy at age 65 being the highest among all EU countries for both men (15.7 compared to the EU average 9.4) and women (16.8 compared to the EU average 9.4).²

1. Lower education levels refer to people with less than primary, primary or lower secondary education (ISCED levels 0–2) while higher education levels refer to people with tertiary education (ISCED levels 5–8).

2. These are based on the indicator of 'healthy life years', which measures the number of years that people can expect to live free of disability at different ages.

Figure 1. Life expectancy in Sweden is the fifth highest in the EU

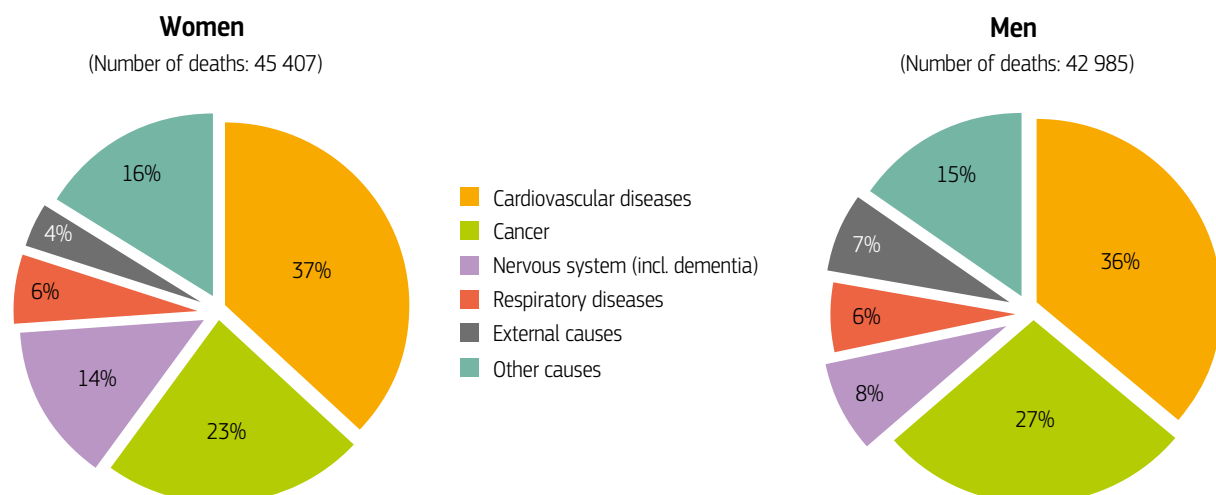


Source: Eurostat Database.

Cardiovascular diseases and cancer are the largest contributors to mortality

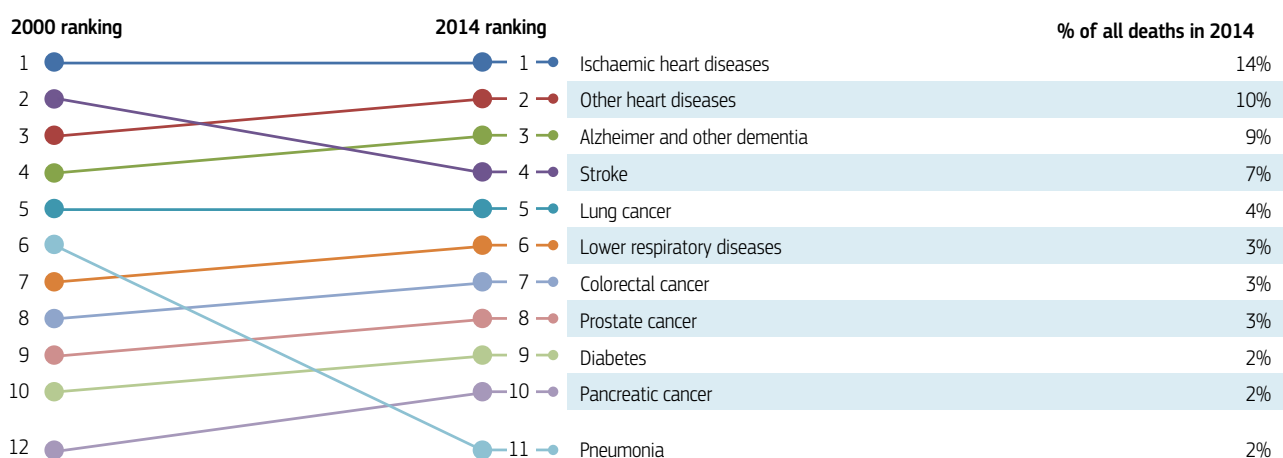
Cardiovascular diseases and cancer are the leading causes of death among women and men in Sweden (Figure 2). In 2014, 32 600 people died from cardiovascular diseases (accounting for 37% of all deaths among women and 36% of all deaths among men) and 22 400 from cancer (accounting for 23% of all deaths among women and 27% of all deaths among men).

Looking at more specific causes of death, since 2000 the top five leading causes of death in Sweden remain the same but their rankings have changed. Ischaemic and other heart diseases are still the largest causes of death. But, Alzheimer's disease and other dementias have replaced stroke in the top three causes (Figure 3). The strong rise in the number of deaths from Alzheimer's disease and other dementias reflects population ageing, better diagnosis, lack of effective treatments and more precise coding of these conditions as the cause of death.

Figure 2. Cardiovascular diseases and cancer account for nearly two-thirds of deaths in Sweden

Note: The data are presented by broad ICD chapter. Dementia was added to the nervous system diseases' chapter to include it with Alzheimer's disease (the main form of dementia).

Source: Eurostat Database (data refer to 2014).

Figure 3. Heart diseases remain the most common cause of death followed by Alzheimer's disease and other dementias

Source: Eurostat Database.

Musculoskeletal problems and depression are among the leading causes of poor health

After the burden of diseases caused by fatal conditions, musculoskeletal problems (including low back and neck pain) are an increasing cause of disability-adjusted life years (DALYs)³ lost in Sweden (IHME, 2016). Major depressive disorders are another leading health problem that, even if not fatal, have serious life-limiting consequences.

Based on self-reported data from the European Health Interview Survey (EHIS), one in six people in Sweden live with hypertension, one in ten live with chronic depression, and one in thirteen live with asthma. More positively, less than 5% of people report living with diabetes, a lower rate than in most other EU states. People with the lowest level of education are 6% more likely to live with asthma and more than two and a half times as likely to live with diabetes than those with the highest level of education.⁴

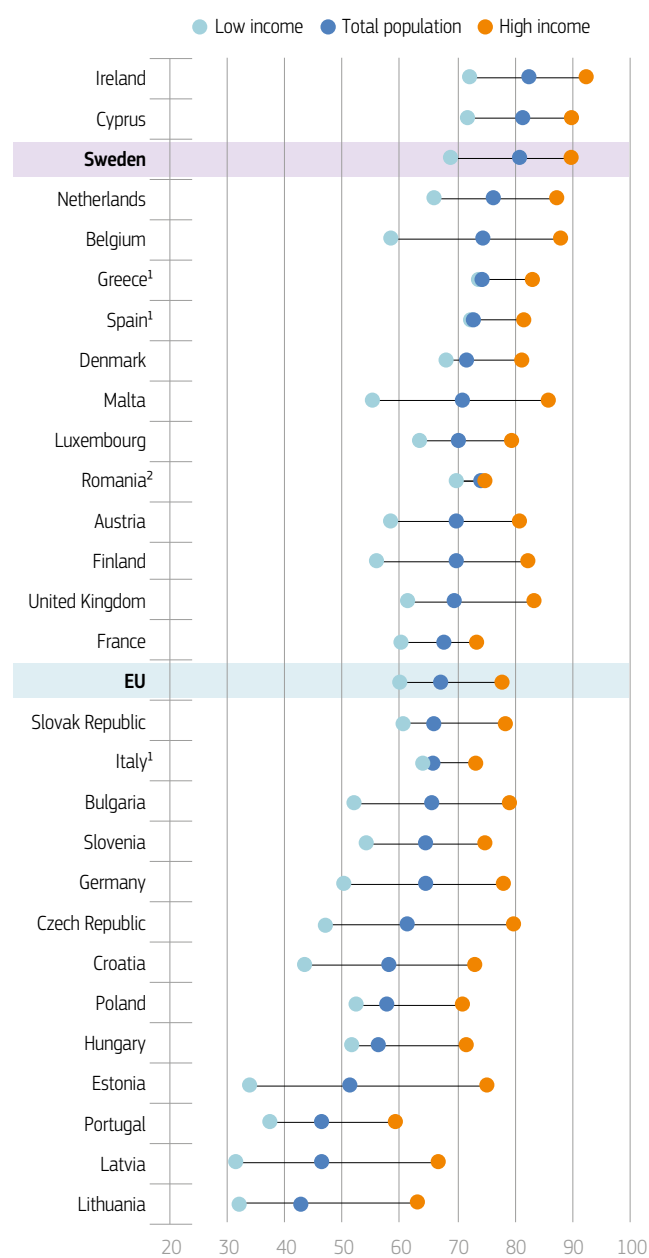
3. DALY is an indicator used to estimate the total number of years lost due to specific diseases and risk factors. One DALY equals one of healthy life lost (IHME).

4. Inequalities by education may partially be attributed to the higher proportion of older people with lower educational levels; however, this alone does not account for all socioeconomic disparities.

Most of the population report being in good health, but the gap between high- and low-income populations is large

The proportion of the Swedish population reporting to be in good health (80% in 2015) is much higher than the EU average (67%) and third highest in the EU behind Ireland and Cyprus (Figure 4). As in other EU countries, there is a substantial gap in self-rated health by socioeconomic status: 89% of people in the highest income quintile report to be in good health, compared with 67% of those in the lowest income quintile.

Figure 4. Most people in Sweden report to be in good health, but there are disparities by income group



1. The shares for the total population and the low-income population are roughly the same.
2. The shares for the total population and the high-income population are roughly the same.

Source: Eurostat Database, based on EU-SILC (data refer to 2015).

3 Risk factors

Behavioural risk factors in Sweden are below most EU countries

Based on IHME estimations, over one quarter (26%) of the overall burden of disease in Sweden in 2015 (measured in terms of DALYs) can be attributed to behavioural risk factors, with dietary risks, smoking, alcohol use and physical inactivity contributing the most (IHME, 2016). This is, however, a lower share than in most other EU countries.

Smoking rates continue to decline

The proportion of adults who smoke in Sweden has decreased substantially since 2000 (from 19% to 12%) and is the lowest among all EU countries (Figure 5). Smoking rate among adolescents is also the lowest in the EU, with steep declines in regular smoking among 15-year-olds girls (from 19% in 2001–02 to 7% in 2013–14) and boys (from 11% in 2001–02 to 6% in 2013–14). These low smoking rates in Sweden are the result of a comprehensive tobacco control policy in place for many years (see Section 5.1).



Alcohol consumption is the lowest in Europe, but binge drinking remains a problem

Alcohol consumption among Swedish adults is the lowest in the EU with adults consuming 7.2 litres per capita in 2015, although this is up from 6.2 litres in 2000. Alcohol consumption among 15-year-olds is also among the lowest in the EU, with 18% of girls and 15% of boys reporting having been drunk at least twice in their life (compared to an EU average of 23% among girls and 27% among boys).

However, there remains a challenge in reducing regular binge drinking⁵ among a sizeable proportion of adults. Over 20% of adults in Sweden (12% of women and 29% of men) report heavy alcohol consumption on a regular basis, which is slightly higher than the EU average. Sweden has already put in place a range of alcohol control policies (see Section 5.1), but more targeted measures may be needed to reduce alcohol abuse among specific segments of the population.

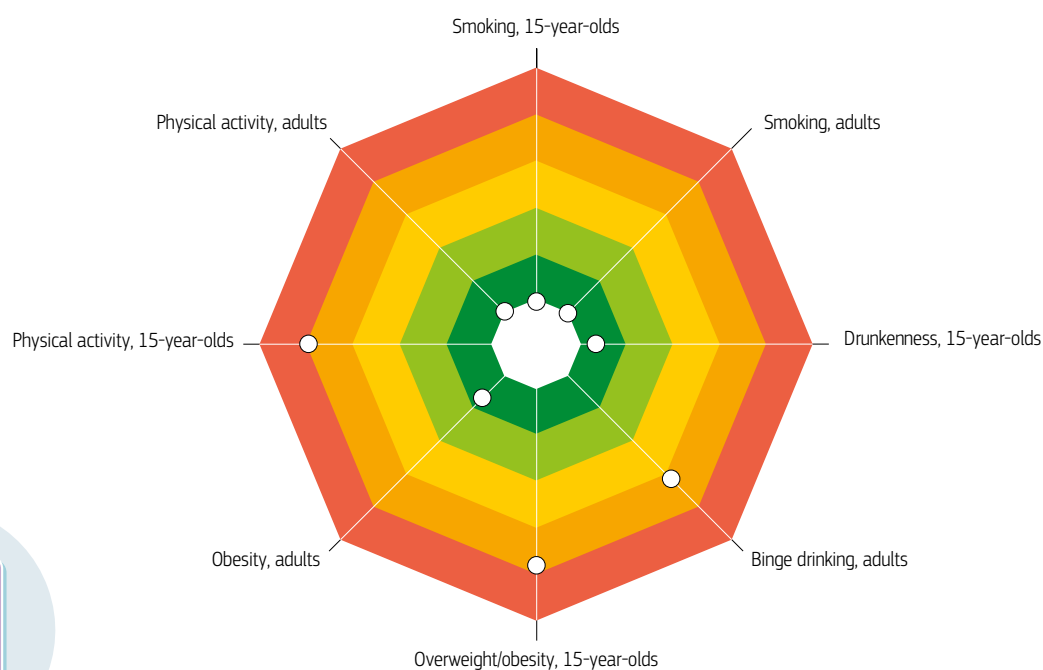
Growing rates of obesity and physical inactivity among adolescents present a major challenge

Swedish 15-year-olds have above EU average rates of obesity and overweight (19% combined, up from 11% in 2002) and less than EU average of physical activity. This is of particular concern given that being overweight or obese during childhood or adolescence is a strong predictor of becoming overweight or obese as an adult.

Many behavioural risk factors are more common among disadvantaged populations

As in other EU countries, many behavioural risk factors are much more prevalent among populations with low level of income or education. The prevalence of smoking is three times higher and obesity is over 50% more prevalent among the population with the lowest level of education compared to those with the highest level of education. Currently, the government has a strong focus on reducing inequalities in risk factors to health (see Section 5.1).

Figure 5. Overweight and obesity combined with lack of physical activity among adolescents is a growing public health issue



Note: The closer the dot is to the centre the better the country performs compared to other EU countries. No country is in the white 'target area' as there is room for progress in all countries in all areas.

Source: OECD calculations based on Eurostat Database (EHIS in or around 2014), OECD Health Statistics and HBSC survey in 2013–14. (Chart design: Laboratorio MeS).

5. Binge drinking behaviour is defined as consuming six or more alcoholic drinks on a single occasion, at least once a month over the past year.

4 The health system

Universal coverage is achieved through a decentralised national health service

The responsibility for financing, purchasing and providing all individual health services in Sweden is decentralised to 21 regions. Regionally and locally established taxes are the basis for revenue collection, but a national redistribution scheme is designed to equalise the capacity to provide health services across the country. The state is responsible for regulation and supervision. It provides additional funding through general block grants, earmarked funding for outpatient pharmaceuticals and specific national programmes. The regions increasingly undertake initiatives to work cooperatively to share investments and cluster services. This is often initiated and supported by the national government, for example when six regional cancer centres were founded in 2011 to improve prevention and service coordination in cancer care.

Health spending is relatively high, and the share of public funding is above average

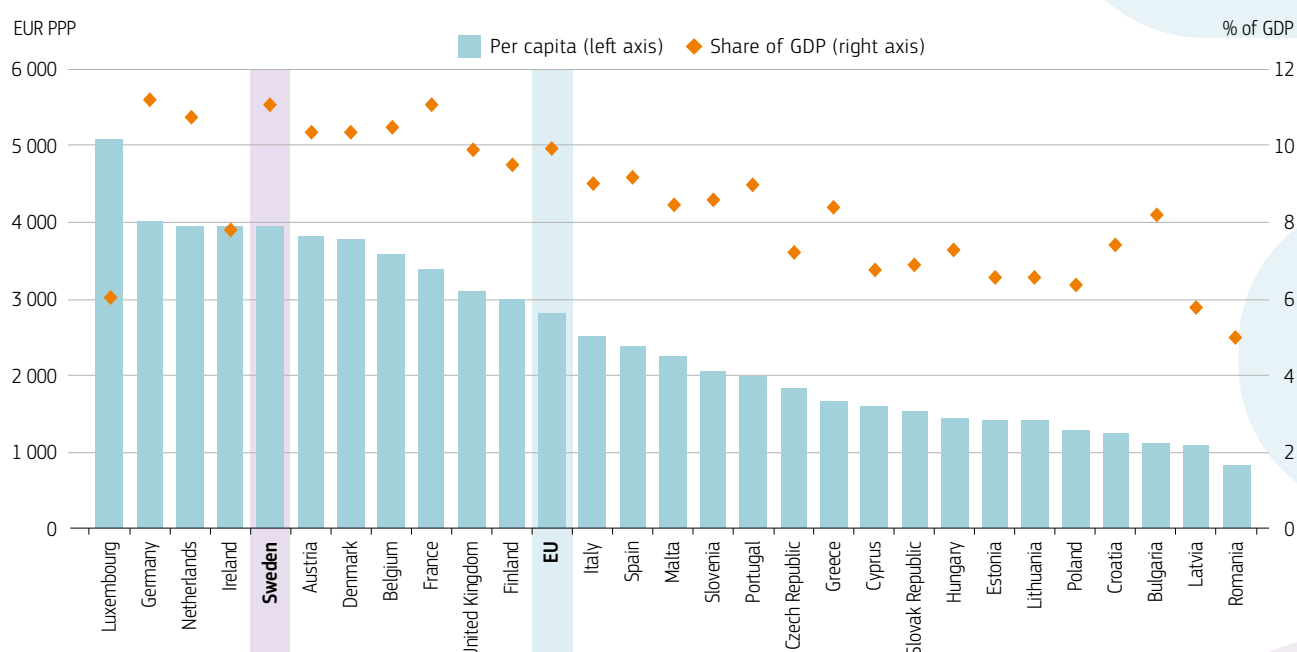
Sweden has the third highest spending on health as a share of GDP in the EU, 11.0% compared to 9.9% in the EU in 2015. In terms of spending per capita, Sweden spent EUR 3 932 per capita on health in 2015 (adjusted for differences in purchasing power), which is the fifth highest in the EU (Figure 6).

Public expenditure accounts for 84% of the total, a share which has been fairly stable over the past decade and is above the EU average (79%). Most private expenditure (93%) is paid out-of-pocket directly by households and voluntary health insurance still only plays a minor (but growing) role (see Section 5.2). The 290 municipalities fund elderly care, home care and social care, while the regions are responsible for primary, psychiatric and specialist health care. Local and regional taxes are supplemented by the central government and by user charges. Subsidies for prescription drugs are paid for through designated state grants to the regions.

Population coverage is high but user charges vary across regions

Health services are covered for all legal residents and emergency care is provided to all patients from the EU/EEA and nine other countries with bilateral agreements. There are direct user charges (flat-rate payments) for primary and specialist care, which are set by the regions, leading to variation across the country. In 2014, the fees for consulting a primary care physician varied between SEK 100–300 (EUR 11–33), for an outpatient hospital specialist between SEK 200–350 (EUR 22–37), and per day of hospitalisation for an adult between SEK 80–100 (EUR 9–11). There is a cap of SEK 1 100 (EUR 120) over 12 months on cost-sharing for health services and a separate cap for prescribed medicines, which are

Figure 6. Sweden is among the highest spenders on health in the EU



Source: OECD Health Statistics, Eurostat Database, WHO Global Health Expenditure Database (data refer to 2015).

fully funded by the patient up to SEK 1 100 (EUR 120) per year, after which the copayment decreases step-wise until reaching the ceiling of SEK 2 200 (EUR 240).

Cost-sharing exemptions apply for children, adolescents, pregnant women and older people. Dentistry has separate and less generous coverage and no cap in cost-sharing. Private supplementary insurance is held by 6% of the population, mostly in the form of coverage from employers to provide quicker access to specialists and elective treatment (see Section 5.2).

Most hospitals are publicly owned, but many primary care providers are private

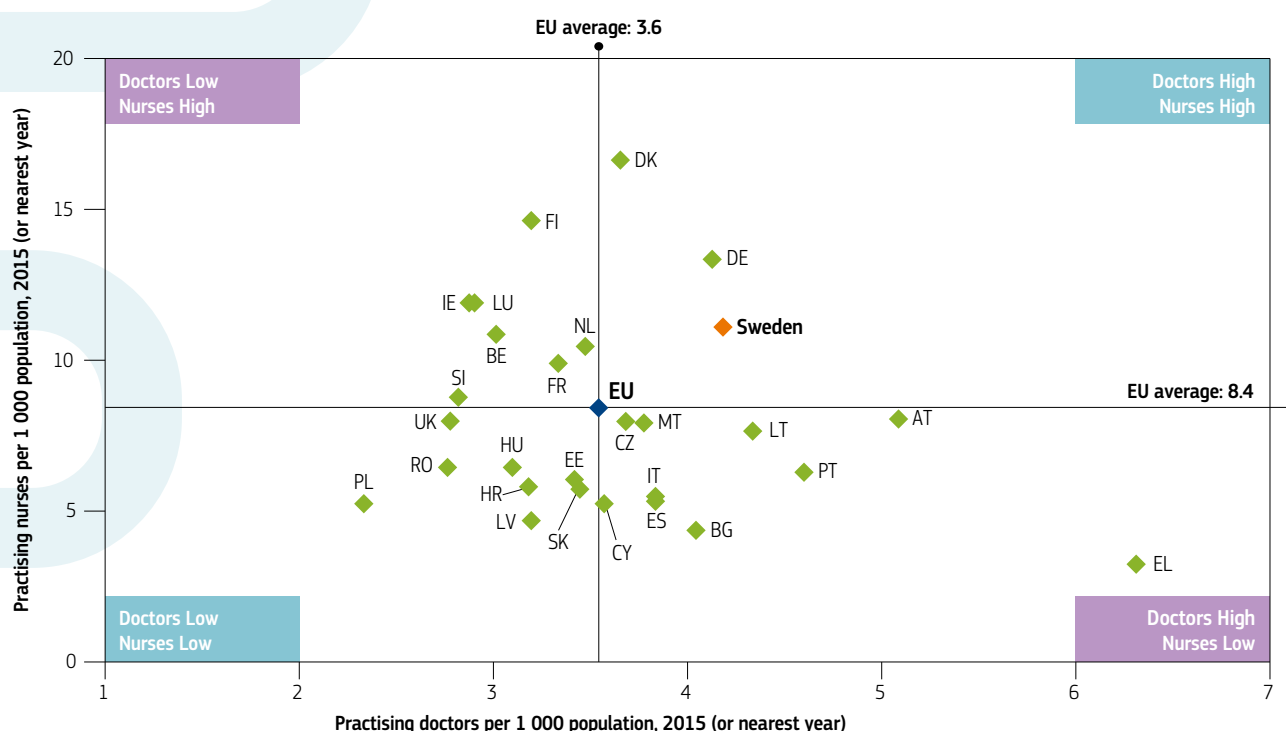
In Sweden, there is a mix of publicly and privately owned health care facilities, but they are all publicly funded. Highly specialised care, requiring the most advanced technical equipment, is concentrated in seven public university hospitals. There are also about 70 public hospitals at the regional level of which about two-thirds provide acute care on a 24/7 basis. In addition, Sweden has six private hospitals of different size and profile.

Primary care is provided by over 1 100 primary care units, of which 42% are private, although the ownership structure differs widely between regions. The share of private primary care providers has increased rapidly in recent years. Some regions allowed unrestricted establishment for accredited providers already ten years ago and in 2010 this right to freely establish new primary care clinics with public reimbursement became national law. Public and private physicians (including hospital specialists) and other health workers are predominantly salaried employees. Capital investments are generally decided upon and funded by the regions.

The number of physicians and nurses is relatively high

As shown in Figure 7, the number of physicians and nurses per population in Sweden is well above the EU average with 4.2 practicing doctors per 1 000 population (compared with an EU average of 3.6) and 11.1 practicing nurses per 1 000 population (compared with an EU average of 8.4). Most physicians (70%) have a recognised specialisation, and almost one-quarter of them are specialists in general medicine.

Figure 7. Sweden has more doctors and nurses than most EU countries



Note: In Portugal and Greece, data refer to all doctors licensed to practice, resulting in a large overestimation of the number of practising doctors (e.g. of around 30% in Portugal). In Austria and Greece, the number of nurses is underestimated as it only includes those working in hospital.

Source: Eurostat Database.

Sweden has a very low level of hospital beds

Since 1990, Sweden has reduced the number of acute care hospital beds and the ratio per population is now the lowest of all EU countries, with only 2.3 acute care beds per 1 000 population, compared to an EU average of 4.2. The average length of hospital stay is also very low at 5.9 days, which is third lowest among EU countries (see Section 5.3).

High use of electronic patient records does not prevent fragmented health information systems

Patient records are kept electronically with most primary care providers using electronic patient records for diagnostic data. Moreover, ePrescriptions are used with few exceptions. Efforts are being made towards harmonising patient records across all provider levels. At the national level, there are efforts to integrate various information systems. However, these efforts have been costly and cumbersome, have encountered complaints about functionality and user-friendliness and have not yet been implemented on a larger scale.

Free choice of provider and timely access are guaranteed

A free choice of primary care provider and freedom of establishment for accredited primary care providers is nationally mandated in Sweden. There is no formal gatekeeping role in most regions and patients are free to contact specialists directly. Furthermore, a health care guarantee act stipulates maximum waiting times for a range of services. This is intended to strengthen the patient's position in accessing services. The act describes a '0-7-90-90' rule, meaning same day contact with the health care system; seeing a GP within seven days; consulting a specialist within 90 days; and waiting for no more than 90 days after being diagnosed to receive treatment. However, compliance with this waiting time guarantee varies largely across the country and no region has fully been able to meet these rules (see Section 5.2).

5 Performance of the health system

5.1 EFFECTIVENESS

Low amenable mortality rate indicates that the Swedish health care system is generally effective

Sweden has comparatively low rates of amenable mortality⁶, which points towards an effective health care system in avoiding deaths from conditions that are deemed to be treatable in modern health care (Figure 8). Amenable mortality rates have been reduced by 25% in Sweden since 2005.

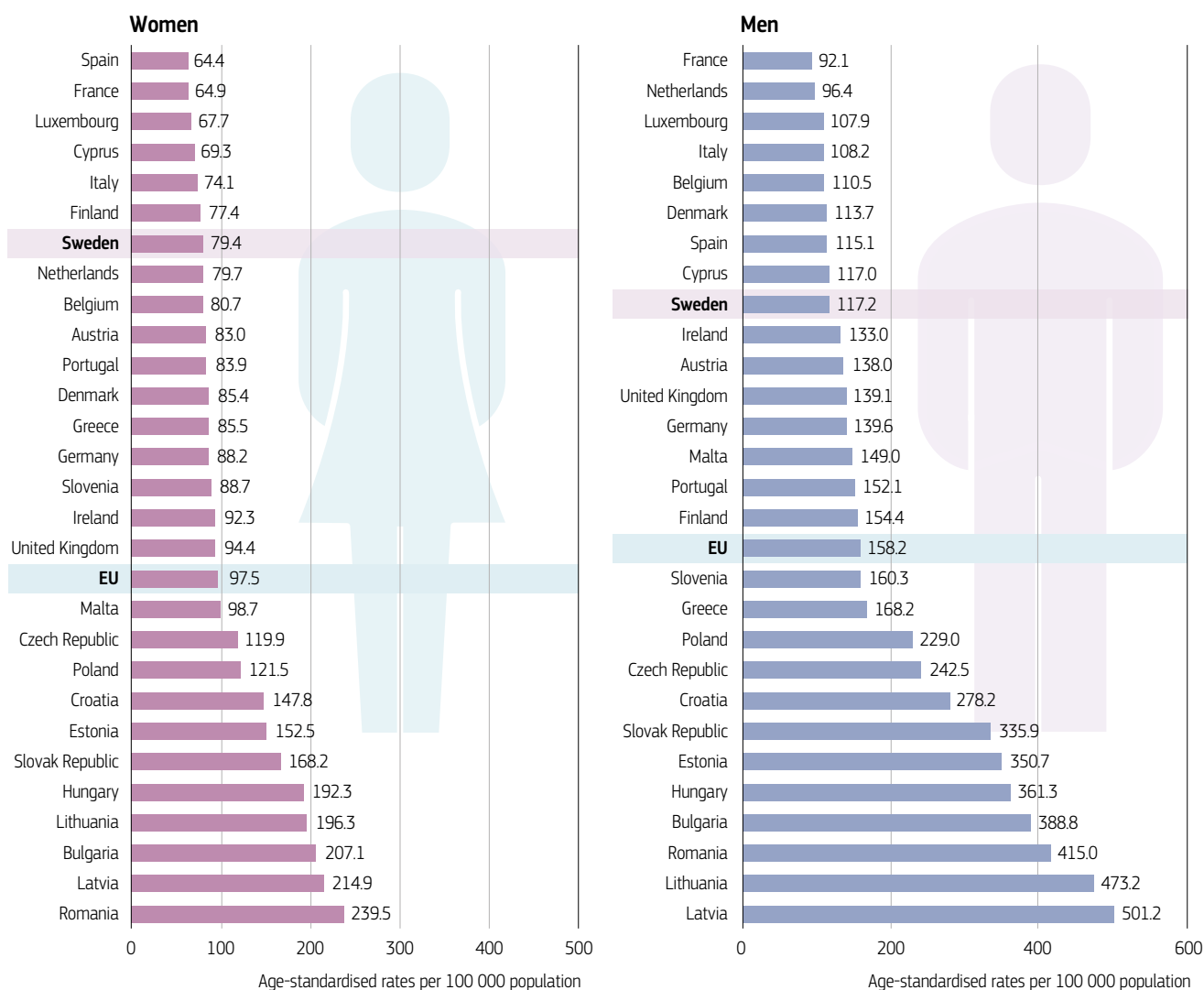
More people survive from heart attacks and strokes

Sweden has low rates of 30-day mortality following hospital admissions for heart attack (acute myocardial infarction, AMI) and stroke. Mortality rates for heart attack have decreased between 2005–15 in Sweden, as in many other EU countries (Figure 9). Better access to high-quality acute care for heart attack, including evidence-based interventions and high-quality specialised health facilities, have helped to reduce these 30-day mortality rates (OECD, 2015).

Chronic care management in primary care settings face challenges

Effective management of patients with one or more chronic disease is a commonly debated concern in Sweden. More effective primary care delivery could increase the overall efficiency and responsiveness of the health system considerably. The results from the 2014 Commonwealth Fund International Health Policy Survey show that the share of Swedish patients reporting that their medical contact (doctor or other) are often or always informed about the care they have received in hospital is much lower than in other countries (53% only, compared to 90% in Germany or 84% in France). Similarly, only 45% report that their doctor always or often provides them help in coordinating their care with other providers, compared to 58% and 68% in Germany and France respectively (Swedish Agency for Health and Care Services Analysis, 2014). Even if these problems are well known and receive attention, Sweden is still struggling with strengthening primary care delivery, partly because of difficulties with the recruitment of GPs (see Section 5.3).

6. Amenable mortality is defined as premature deaths that could have been avoided through timely and effective health care.

Figure 8. Low amenable mortality rates in Sweden reflect effective health care delivery

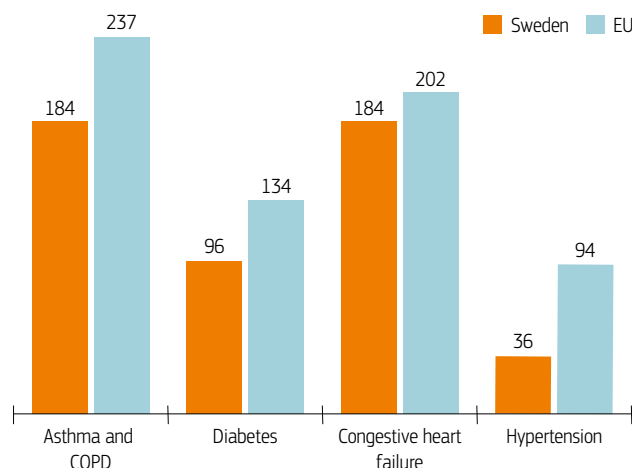
Source: Eurostat Database (data refer to 2014).

Figure 9. Mortality rates following hospital admissions for stroke and AMI are among the lowest in the EU**30-day mortality rate following admission for ischaemic stroke****30-day mortality rate following admission for AMI**

Note: This indicator is based on patient-level data. Three-year average for Luxembourg. The EU average is unweighted. Source: OECD Health Statistics 2017.

Even though Swedish primary care has challenges with ensuring proper care coordination, hospital admission rates for chronic diseases, such as asthma, chronic obstructive pulmonary disease (COPD), diabetes, congestive heart failure (CHF) and hypertension, are below EU averages (Figure 10). Nevertheless, for all these diagnoses, several countries have lower rates, indicating room for improvement.

Figure 10. Avoidable hospitalisation for chronic conditions is lower in Sweden than the EU average



Note: Data refer to age-sex standardised hospital admission rates per 100 000 population.

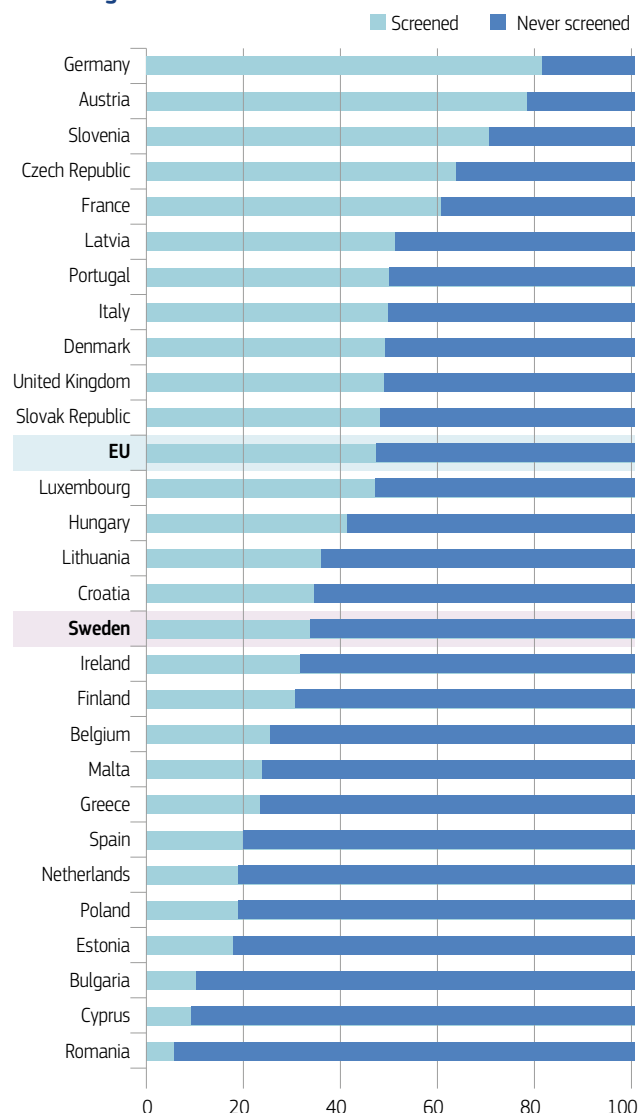
Source: OECD Health Statistics (data refer to 2015 or nearest year).

Cancer care has improved, but screening is still not fully rolled out

Survival following diagnosis for different types of cancer (such as breast cancer, cervical cancer and colorectal cancer) increased in Sweden over the past decade and is among the highest in the EU. Since the launch of the national cancer care strategy in 2009, Sweden has put much effort into improving cancer care. While the strategy had a strong focus on quality and equity in treatment, it also targeted prevention and early detection (SOU, 2009).

All Swedish regions offer mammography screening with a high level of coverage. Among women aged 50–69, 90% report they have had a breast examination in the past two years. Cervical cancer screening is also rolled out nationally with a high uptake. On the other hand, screening for colorectal cancer is not yet a standard procedure across the country, which explains the relatively low coverage in Sweden, with only 33% of people aged 50–74 reporting to have ever been screened compared to the EU average rate of almost 50% (Figure 11). A full rollout of regular screening for colorectal cancer has so far only been implemented in the Stockholm region.

Figure 11. Sweden has relatively low colorectal cancer screening rates



Source: Eurostat Database (data refer to 2014).

Sweden has a long tradition of public health policies to reduce risk factors and preventable mortality

Sweden's low levels of preventable deaths for causes such as lung cancer (third lowest mortality rate in the EU), alcohol-related deaths (eighth lowest) and road traffic accidents (second lowest) can partly be explained by strong public health policies. Public awareness campaigns and high taxes on tobacco and alcohol, a long tradition in Sweden, have contributed to restricting consumption. The alcohol control policy is characterised by a state retail monopoly that limits access to dedicated stores with restricted opening hours. It also imposes a minimum age limit of 20 years to buy liquor.

Low mortality from traffic accidents is the effect of a conscious strategy over the past two decades, called Vision Zero, meaning that nobody should be killed or seriously injured in traffic accidents, endorsed by the national Parliament in 1997. The implementation of this road safety strategy includes the separation of opposing traffic lanes, a substantial extension of bike lanes and tight drunk-driving restrictions. Approximately 300 people died in road accidents in Sweden in 2015, down from around 600 in 1997, giving Sweden the third lowest death rate in the EU, after Malta and the United Kingdom.

A recent major effort in public health is the 2014 declaration by the government to eliminate all avoidable health gaps between population groups within one generation. Towards this objective, a Commission for Equity in Health was established in June 2015. The Commission presented their report in June 2017, describing the importance of a broad approach across many sectors of society, beyond health care and health risk factors, to close health gaps in the population.

The concerted efforts to curb antimicrobial resistance also belong to the tradition of working for robust public health across sectors of society, in this case mainly health service delivery and the agricultural sector (see Box 1).

BOX 1. SWEDEN IS LEADING THE FIGHT AGAINST ANTIMICROBIAL RESISTANCE

Sweden has for several years had a strong focus on addressing antimicrobial resistance, which has led to one of the lowest prescription rates of antibiotics in the livestock sector in the EU. In the health sector, the work is driven by professional groups in each region providing guidance and advocacy for a rational use of antibiotics in the form of clinical guidelines, training and information campaigns. The national government supports the work of these professional groups by funding national coordination and research.

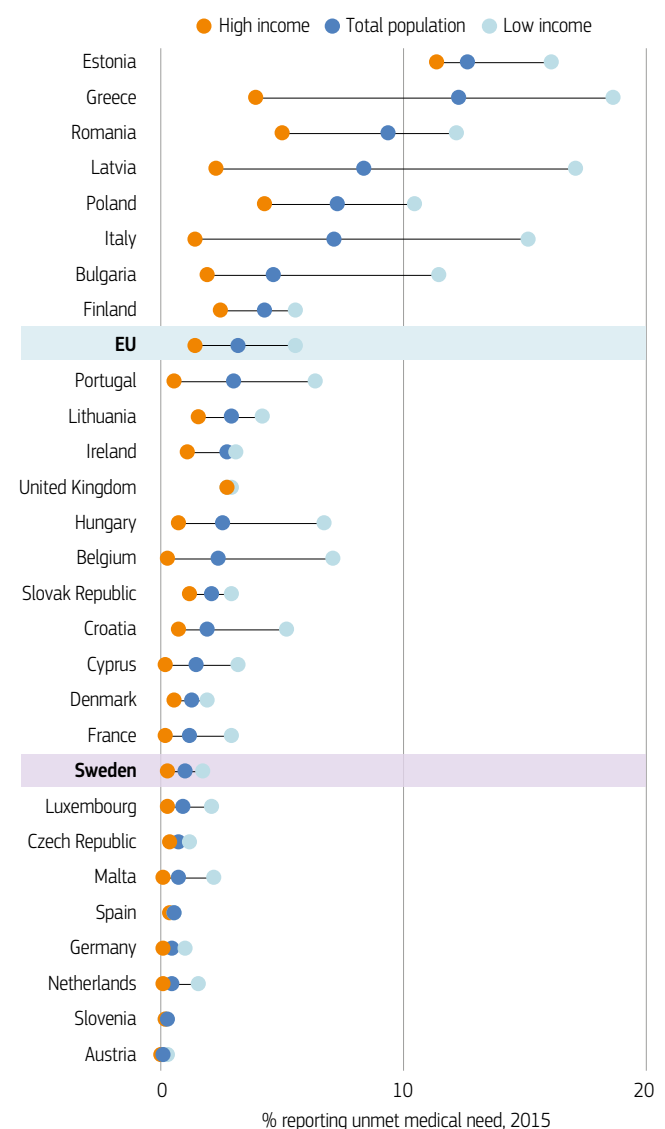
Sweden displays some of the lowest resistance rates in the EU for the bacteria under surveillance by the European Centre for Disease Prevention and Control (ECDC, 2017). It has engaged internationally in a variety of initiatives, such as the Joint Programming Initiative on Antimicrobial Resistance and the Global Health Security Agenda. Additionally, Sweden has shared its expertise and knowledge through bilateral agreements with other countries.

5.2 ACCESSIBILITY

Sweden has relatively low levels of unmet needs for medical care

A small share of the Swedish population report unmet needs for medical care due to costs, distance or waiting times. In addition, the difference between high- and low-income groups is among the lowest in the EU (Figure 12).

Figure 12. Swedish people report low unmet needs for medical care



Note: The data refer to unmet needs for a medical examination or treatment due to costs, distance to travel or waiting times. Caution is required in comparing the data across countries as there are some variations in the survey instrument used.

Source: Eurostat Database, based on EU-SILC (data refer to 2015).

The benefit package is broad, but some variation across the country still exists

Sweden's health and medical services act stipulates that health care shall be provided on equal terms for the entire population. This means that all residents are automatically entitled to publicly funded health services. Recently, the regulation of coverage for immigrants was changed with some improvements for new arrivals (see Box 2).

Even though Sweden has a broad benefit package and a health care law with a strong focus on equity and needs-based health provision, the regional structure with 21 autonomous regions leads to somewhat different service coverage rules in different parts of the country. To mitigate this structural problem, there are normative guidelines developed by the National Board for Health and Welfare and coordination efforts by the Swedish Association of Local Authorities and Regions where regions agree about common rules and strategies. For example, in 2014 in-vitro fertilisation treatment was harmonised across all regions in terms of age limits and public funding to reduce inequality in public support to assisted reproduction.

BOX 2. ACCESS TO PUBLICLY FUNDED CARE FOR IMMIGRANTS HAS BEEN EXTENDED

Some population groups residing in Sweden are not fully covered for health care, for example asylum seekers, irregular immigrants, temporary contractors and students from non-EU countries. Since Sweden has a relatively large immigration, defining the right to health services for asylum seekers as well as irregular immigrants has been a challenge. While adult asylum seekers have access only to acute care and maternal care, all children, regardless of residence status, have full right to services. In July 2013, the coverage of acute care and maternal services was extended to irregular immigrants, who are believed to grow in numbers (Migrationsverket, 2017). In this group, many people are former asylum seekers who often avoid formal care for fear of being reported. Voluntary health care providers organised by NGOs meet some of their primary care needs.

Inequity is a common concern in pharmaceutical consumption. The introduction of new drugs is subject to strict national health technology assessment (HTA). However, in practice, there are regional and even provider and hospital department differences in access caused by local budget constraints and implicit rationing, for example for expensive drugs in cancer treatment. This is an equity problem and creates further differences in entitlements across the country.

Copayment ceilings limit adverse effects of user fees, but cost barriers exist for low income people

About 15% of health spending in Sweden is funded by out-of-pocket expenditures, which is similar to the EU average. The fees are applied to almost all types of services and goods, with exceptions for maternal and child health services provided in primary care settings. The regions independently set the fees (except for prescribed medicines and dental services), and the fee structure provides an incentive to consult primary care over hospital visits (see Section 4). The fees are not negligible and may therefore have a service-rationing effect.

The national ceilings on fees are separate for care services, prescription medicines, health-related transport and medical aides. This means the total yearly amount can be substantial for people with low income. In addition, similar to most countries, dentistry is not included in the public health care benefits package and is subject to higher copayments, although all children and adolescents up to the age of 21 are fully covered (to be increased to 23 in 2019). While Sweden has very low levels of catastrophic expenditure⁷ due to health service utilisation, some people report financial accessibility problems. Almost 7% of people in the lowest income group reported some unmet needs for dental examination in 2015, compared to 3% for the national average (Eurostat, EU-SILC). Also, 16% of low-income people reported that they faced some cost-related barriers related to doctor visits, medical tests, purchasing prescribed pharmaceuticals or other follow-up treatments, compared to 7% for other people (Commonwealth Fund, 2016).

Sweden has one of the EU's fastest growing private health insurance markets

The number of individuals with a private health insurance has increased rapidly in the last 15 years, with six percent of the population now estimated to have some kind of supplementary health insurance (Swedish Insurance Federation, 2017), although the content and premiums vary substantially. These insurances are mostly employment-based and provide policyholders primarily with faster access to outpatient (ambulatory) visits and elective surgery, but often also include health check-ups and other occupational health. Although still marginal, it does raise concerns about equity in access to services, since it is predominantly high-income groups who enjoy this additional coverage.

7. Catastrophic expenditure is defined as household out-of-pocket spending exceeding 40 % of total household spending net of subsistence needs (i.e. food, housing and utilities).

Waiting times for most types of care is one of the long running public debates

In many national health service (NHS) systems, waiting time works as a rationing mechanism. Sweden is no exception and the problem has been subject to long running debate and many policy initiatives, the most forceful being the health guarantee act from 2010 stipulating maximum waiting times for different types of services (see Section 4). Other efforts have been national programmes to incentivise regions to cut queues (abolished in 2015) and several programmes to increase transparency by regularly publishing waiting time data. This has been done both at the individual provider level to help patients make informed choices and at national level comparing regions to put pressure on regional administrations. Waiting times have decreased for some types of care, especially for elective surgery. For knee replacements, the share of patients who have waited more than three months has almost halved between 2010–16, from 31% to 17%.

However, it is also increasingly recognised that the accessibility problem goes beyond waiting times. Swedish health care suffers from an inability to coordinate person-centered care and respond to people's expectations. In 2015, a new law was enacted on patient rights with the objective to empower patients, for example by increasing entitlements to services outside the home region, although its effects have been modest so far. Cancer care, which shows very good outcomes in terms of survival, has been criticised for long waiting times and a lack of people-centeredness. The latest national reform in cancer care attempts to improve accessibility by incorporating these aspects, creating standardised pathways that include all stakeholders in the care process to achieve a minimum of delays and uncertainty for the patient (Wilkens et al., 2016).

5.3 RESILIENCE⁹

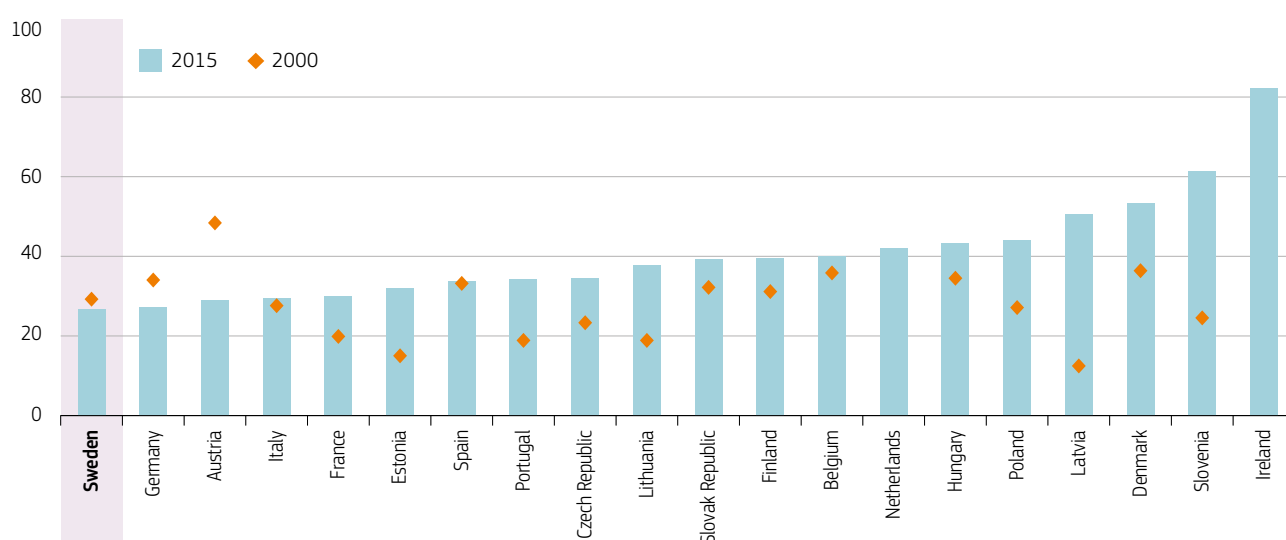
The ageing population is a challenge but less so than in many other EU countries

Similar to other EU countries, Sweden has a long-term challenge to respond to the health and long-term care needs of its ageing population and the increasing burden of chronic conditions. However, the old age dependency ratio (the ratio of people aged 65 or above relative to the working-age population), which is currently one of the highest among EU countries, is predicted to rise less steeply than in most other EU countries between now and 2060 due to higher birth rates and higher immigration (European Commission and European Policy Committee, 2015).

Sweden relies on foreign-trained medical doctors, but rural areas have recruitment problems

The capacity of medical schools in Sweden is expanding but not at the same pace as the demand for doctors. As a result, the number and share of foreign-trained doctors have increased rapidly over the past decade. More than one in four doctors (27%) have been trained outside the country, although 15% of these foreign-trained doctors are Swedish nationals who have returned after studying abroad. The annual number of domestic medical graduates has increased by over 25% between 2000–15 (from about 800 per year in 2000 to more than 1 000 in recent years), but the domestic training of doctors has increased less rapidly than the immigration of foreign-trained doctors, which has been multiplied by three. There are ongoing debates on whether the domestic training capacity is sufficient to respond to the replacement needs and expected growing demands (Figure 13).

Figure 13. Sweden has a low number of medical graduates relative to practising physicians



Note: Per 1 000 practising physicians.

Source: OECD Health Statistics (data refer to 2015 or nearest year).

9. Resilience refers to health systems' capacity to adapt effectively to changing environments, sudden shocks or crises.

The focus on care integration and coordination is increasing

The vast majority of doctors in Sweden are specialists, and the medical staff is unequally distributed across the country. GPs account for only 15% of all physicians, a share that is considerably lower than in most EU countries. Northern regions of Sweden, but also generally rural areas, have difficulties recruiting GPs. In addition, the free choice reform with a free establishment right for providers has tended to concentrate physicians in urban areas.

The lack of medical staff in certain geographical and medical specialist areas, notably GPs in rural areas, has contributed to an increasing market of locum physicians and nurses, employed by staffing companies specialising in health, which has had a negative impact on both staff costs and continuity of care for patients. The number of patients in Sweden reporting they have had to seek hospital emergency care because a primary care physician was not available is considerably higher than in most other EU countries (van den Berg et al., 2016). Also, after-hour accessibility to primary care is often limited and unnecessary hospital emergency department visits for minor problems is a common complaint among both patients and health care professionals (Commonwealth Fund, 2016).

Lack of nurses with specialist training hampers more efficient use of hospital resources

Sweden has successfully increased the scope of practice for nursing in primary care, for example by using nurses' appointments in lieu of GPs consultations and establishing a national call service and website staffed by nurses, which effectively functions as first line of services. Nurses also frequently head medical departments in

hospitals and hold other managerial positions. However, the number of specialist nurses and other advance practice nurses remains low, and the number of new nurses graduating with specialty training and an advanced degree has fallen since 2005. The lack of specialist nurses and the inability to retain nurses in clinical practice hamper hospitals to more efficiently use their resources and more generally impedes continued system efficiency gains through increased reliance on nurses.

Sweden has managed to shift large parts of care outside inpatient settings

Over the past two decades, Sweden has worked consistently on moving services from inpatient to outpatient settings, which has resulted in the smallest share of inpatient spending in the EU (Figure 14). As noted in Section 4, Sweden has the lowest number of hospital beds in the EU and the average length of stay is also among the lowest. Bed occupancy rates are very high, to the extent that this has caused a lot of concern among many clinicians and patients about patient safety, given very narrow capacity margins in acute care hospitals and stressful working conditions. Sweden has probably hit the limit in terms of reducing the number of hospital beds and hospital capacity more broadly. A national reporting system has recently been developed, which specifically monitors bed occupancy in clinically inappropriate wards, to diminish adverse effects.

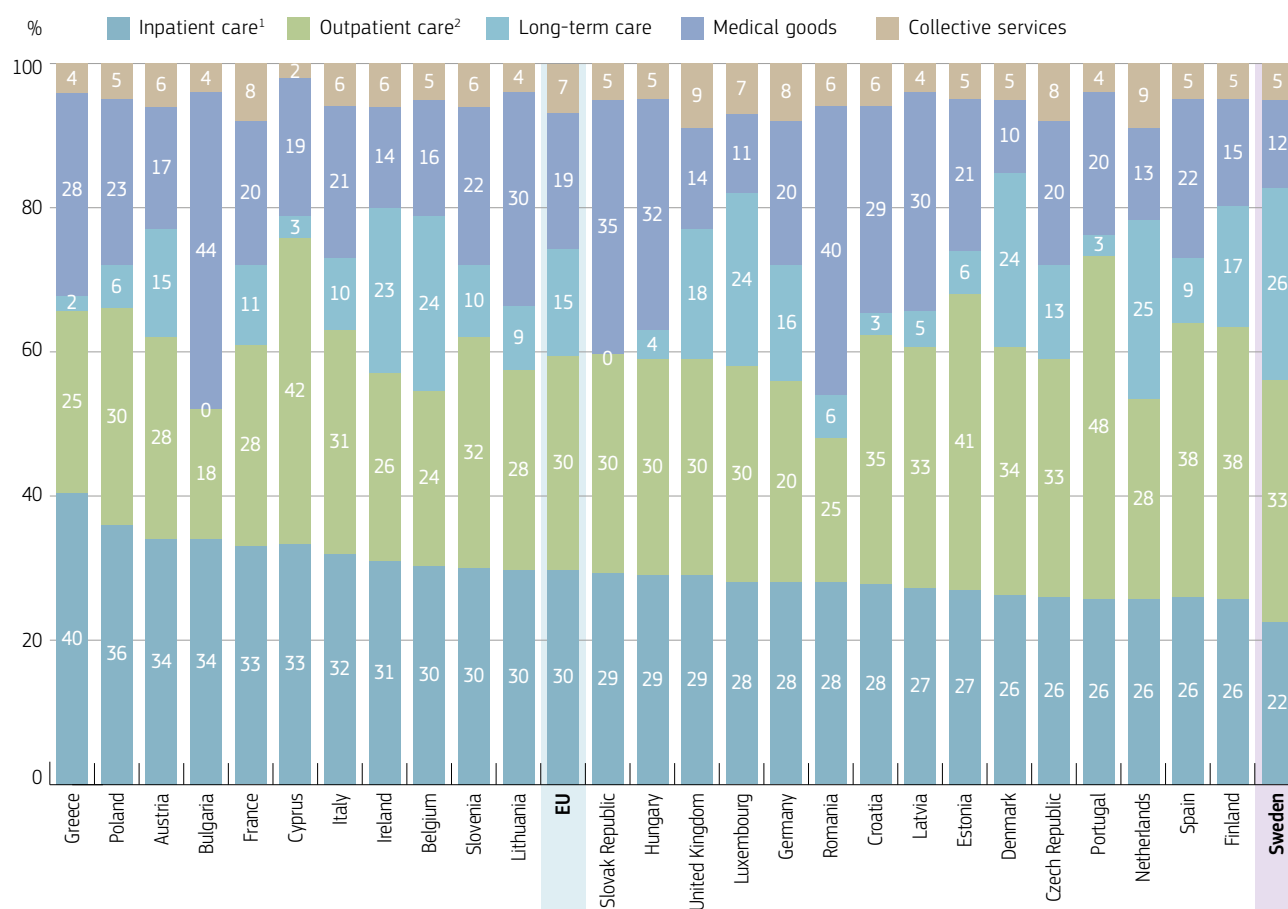
Another striking shift towards outpatient services is the growing use of ambulatory care for surgeries previously conducted at inpatient settings. While nearly all cataract surgeries have for a long time been performed as day care, the use of day care has spread to many other procedures. For example, the share of tonsillectomy (the removal of tonsils) carried out as same-day surgery has increased from about 20% in 2005 to over 70% in 2015.

Figure 14 also shows the relative importance of formal long-term care in the Swedish health system, and the relatively low level of pharmaceutical spending.

Strong focus on performance assessment and evaluation from central government and professional groups

The Swedish quality registers constitute a wealth of information for research and performance assessment. Although initially built by medical professionals on a voluntary basis and still managed by these professional groups, they are increasingly funded by public resources. Most of the over 100 registers are built around specific diagnoses and mainly contain medical and epidemiological information. In combination with unique personal identification numbers, the data can be linked to other registers and can serve to address research questions beyond the specific medical diagnoses.



Figure 14. Sweden spends relatively less resources on inpatient services

Note: Countries are ranked by inpatient care as a share of health expenditure.

1. Refers to curative-rehabilitative care in inpatient and day care settings. 2. Includes home care and ancillary services.

Source: OECD Health Statistics, Eurostat Database (data refer to 2015).

This source, together with several others such as the national patient register, is used for public benchmarking of providers and regional administrations in a series of publications and a public database called Open Comparisons. Many efforts are also made to improve stewardship of the health system. An example of this is the Swedish Agency for Health and Care Services Analysis, established in 2011, to strengthen monitoring of performance in the health sector.

The overall governance system needs reform, but there is not yet consensus about the road ahead

The Swedish administrative structure, based on 21 autonomous regions, raises concern regarding its ability to be efficient and provide services equitably to the whole Swedish population. While the financial redistribution system allows relatively poorer areas to fund their services, the differences in population size and geography create challenges. For example, smaller regions need to rely on neighbouring regions for advanced and complex care, or build

expensive capacity within their own regions. Coordination with the 290 municipalities responsible for elderly care and social services is also organised differently across the country, with varying results. Denmark and Norway have embarked on substantial reforms to target intrinsically similar problems. In Sweden, earlier and recent public investigations suggest that regions should keep broadly similar functions and responsibilities as is, but organised in a smaller number of administrations with larger geographical responsibility. More radical reforms, such as changing responsibilities for care to other administrative levels in order to integrate municipal primary care services with GP services or nationalise specialist services, which has been done in neighbouring countries, have not been subject to the same scrutiny, although for a few diagnoses selected hospitals serve the entire country. In practice, while the administrative and funding structures remain the same, the health sector is slowly developing new links across responsible local authorities and providers, to achieve larger catchment areas.

6 Key findings

- Swedish people live longer and in better health than the average EU citizen. Sweden has the fifth highest life expectancy in the EU and the number of years spent in good health is high. In fact, healthy life expectancy at 65 is the highest among all EU countries for both men and women. The gender gap is relatively low, but there are persistent socioeconomic disparities. For example, the life expectancy of men with a university education is almost five years higher than among those who have not completed their secondary education.
- While smoking and alcohol drinking is generally low in Sweden, overweight and obesity problems are growing public health issues among adolescents and adults. One in seven adults and almost one in five 15-year-olds are overweight or obese, a higher rate than in most EU countries. Physical activity among adolescents in Sweden is also considerably lower than the EU average.
- Many behavioural risk factors are much more prevalent among populations with lower income or education. The prevalence of smoking is three times higher and obesity 50% more likely among the population with the lowest level of education compared to those with the highest level of education. The government has set a goal to eliminate avoidable health status gaps between population groups within one generation, but the action plan to achieve this ambitious goal has not been clearly spelled out yet.
- The Swedish health system's decentralisation into 21 regions contributes to regional differences in service access and outcomes, against the general principle expressed in the health care law. To mitigate this concern, the state redistribution system is designed to ensure a more equitable distribution of resources, and additional funding is available for targeted programmes. While this organisational fragmentation causes differences in coverage, in practice, larger regions are slowly evolving by increasing regional collaboration to share investments and cluster services..
- Sweden has the lowest spending on inpatient services in the EU. In recent decades, the number of hospital beds has steadily declined, as well as the average length of stay, and there has been a growing use of day care surgery. Bed occupancy rates are very high, suggesting that resources are used fully, and hospital staff express growing concerns about patient safety and working conditions.
- Sweden allocates large financial and human resources to health, with the fifth highest spending on health per capita in the EU and high numbers of doctors and nurses. However, there are persistent problems with recruiting staff in rural areas and finding the best mix of doctors and nurses. Some effective task sharing between nurses and doctors has been implemented in primary care, but the lack of specialised nurses hampers greater task sharing in hospitals.
- A relatively small share of the Swedish population report unmet health care needs due to costs, distance or waiting times. The difference between high- and low-income groups is also among the lowest in the EU. The Swedish health system has copayments for most health services, but still protects the population from financial risk through copayment exemptions and ceilings. Waiting times and an inability to coordinate services across different care providers are nonetheless enduring issues.



Key sources

Anell, A., A.H. Glenngård and S. Merkur (2012), "Sweden: Health System Review", *Health Systems in Transition*, Vol. 14(5), pp. 1–159.

OECD/EU (2016), *Health at a Glance: Europe 2016 – State of Health in the EU Cycle*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264265592-en>.

References

Commonwealth Fund (2016), "International Health Policy Survey".

ECDC (2017), *Antimicrobial Resistance Surveillance in Europe 2015*, Annual Report of the European Antimicrobial Resistance Surveillance Network (EARS-Net).

European Commission (DG ECFIN) and Economic Policy Committee (AWG) (2015), "The 2015 Ageing Report – Economic and Budgetary Projections for the 28 EU Member States (2013–2060)", *European Economy* 3, Brussels, May.

IHME (2016), "Global Health Data Exchange", Institute for Health Metrics and Evaluation, available at <http://ghdx.healthdata.org/gbd-results-tool>.

Migrationsverket (2017), <http://www.migrationsinfo.se/>.

OECD (2015), *Cardiovascular Disease and Diabetes: Policies for Better Health and Quality of Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264233010-en>.

OECD/EU (2016), *Health at a Glance: Europe 2016: State of Health in the EU Cycle*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264265592-en>.

Swedish Agency for Health and Care Services Analysis (2014), "Coordinated Health and Care Services – An Analysis of the Coordination Challenges in a Fragmented System for Health and Care Services".

SOU (2009), "A National Cancer Strategy for the Future", Report of the Commission of Inquiry on a National Cancer Strategy, Swedish Government Official Reports.

Swedish Insurance Federation (2017), <http://www.svenskforsakring.se/>

van den Berg, M.J., T. van Loenen and G.P. Westert (2016), "Accessible and Continuous Primary Care May Help Reduce Rates of Emergency Department Use. An international Survey in 34 Countries", *Family Practice*, Vol. 33(1), pp. 42–50.

Wilkens, J. et al. (2016), "The 2015 National Cancer Program in Sweden: Introducing standardized Care Pathways in a Decentralized System", *Health Policy*, Vol. 120(12), pp. 1378–1382.

Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Malta	MT	Slovenia	SI
Belgium	BE	Estonia	EE	Ireland	IE	Netherlands	NL	Spain	ES
Bulgaria	BG	Finland	FI	Italy	IT	Poland	PL	Sweden	SE
Croatia	HR	France	FR	Latvia	LV	Portugal	PT	United Kingdom	UK
Cyprus	CY	Germany	DE	Lithuania	LT	Romania	RO		
Czech Republic	CZ	Greece	EL	Luxembourg	LU	Slovak Republic	SK		

State of Health in the EU

Country Health Profile 2017

The Country Health Profiles are an important step in the European Commission's two-year *State of Health in the EU* cycle and are the result of joint work between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies. This series was co-ordinated by the Commission and produced with the financial assistance of the European Union.

The concise, policy relevant profiles are based on a transparent, consistent methodology, using both quantitative and qualitative data, yet flexibly adapted to the context of each EU Member State. The aim is to create a means for mutual learning and voluntary exchange that supports the efforts of Member States in their evidence-based policy making.

Each Country Health Profile provides a short synthesis of:

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- the organisation of the health system
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