



# State of Health in the EU Sweden

Country Health Profile 2019



### The Country Health Profile series

The State of Health in the EU's Country Health Profiles provide a concise and policy-relevant overview of health and health systems in the EU/European Economic Area. They emphasise the particular characteristics and challenges in each country against a backdrop of cross-country comparisons. The aim is to support policymakers and influencers with a means for mutual learning and voluntary exchange.

The 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 the Health Systems and Policy Monitor network, the OECD Health Committee and the EU Expert Group on Health Information.

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### **Data and information sources**

The data and information in the Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated 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. These EU averages do not include Iceland and Norway.

This profile was completed in August 2019, based on data available in July 2019.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following URL into your Internet browser: http://www.oecd.org/health/Country-Health-Profiles-2019-Sweden.xls

### Demographic and socioeconomic context in Sweden, 2017

Demographic factors	Sweden	EU			
Population size (mid-year estimates)	10 058 000	511 876 000			
Share of population over age 65 (%)	19.8	19.4			
Fertility rate <sup>1</sup>	1.8	1.6			
Socioeconomic factors					
GDP per capita (EUR PPP²)	36 300	30 000			
Relative poverty rate³ (%)	15.8	16.9			
Unemployment rate (%)	6.7	7.6			

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 60 % of median equivalised disposable income.

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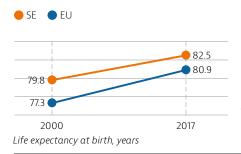
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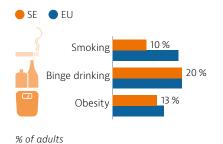
## 1 Highlights

Life expectancy in Sweden is among the highest in the EU. The health system performs well in providing good access to high-quality care, but at a relatively high cost. While most Swedish people enjoy good health in old age, a growing number of people over age 65 have some chronic diseases and disabilities, thus increasing demands on health and long-term care systems. The health system faces persisting challenges in providing equal access to care to the population living in remote regions, ensuring timely access to health services and achieving greater care coordination for people with chronic diseases.



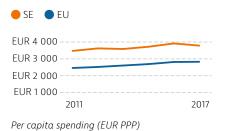
#### Health status

Life expectancy at birth was 82.5 years in 2017 – over 1.5 years above the EU average. While stroke and other cardiovascular diseases are decreasing as causes of death, a growing number of people are dying from Alzheimer's disease and other dementias. About half of Swedes aged over 65 report having one or more chronic diseases.



#### Risk factors

Only 10 % of adults in Sweden smoked every day in 2017, down from 19 % in 2000, and the lowest rate among all EU countries. However, the use of other tobacco products such as snuff is common, especially among men. Overall alcohol consumption per adult has decreased over the past decade, but one-fifth of adults reported heavy alcohol consumption on a regular basis in 2014. The obesity rate among adults increased from 9 % in 2000 to 13 % in 2017 but remains below the EU average.

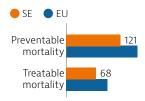


### Health system

Sweden has the third highest health spending in the EU as a share of GDP (11.0 % in 2017 compared to the EU average of 9.8 %), and the third highest per capita spending (EUR 3 872 compared to the EU average of EUR 2 884). Most health spending is publicly funded (84 %), a share also higher than the EU average (79 %).

#### **Effectiveness**

Sweden has low rates of mortality from preventable and treatable causes, which points towards a generally effective public health and health care system.



Age-standardised mortality rate per 100 000 population, 2016

### Accessibility

Access to health care is generally good, but issues concerning access in remote regions and timely access to elective surgery and other health services persist.



% reporting unmet medical needs, 2017

### Resilience

Health expenditure is expected to grow in the years ahead, with pressures also exerted by growing demands for long-term care. Progress has been achieved in the past decade in shifting activities from hospital to primary and community care, but challenges remain in improving access to primary care and care coordination, in particular for people with chronic conditions.

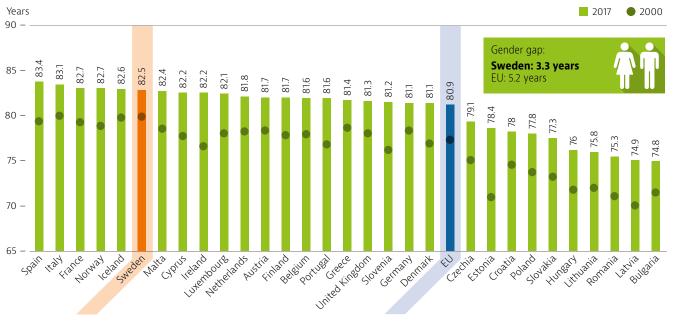
## 2 Health in Sweden

## Life expectancy in Sweden is higher than in most other EU countries

In 2017, life expectancy at birth of the Swedish population was 82.5 years, more than 1.5 years above the EU average (80.9 years). Progress, however, has

been slightly slower in Sweden than elsewhere in the EU. Between 2000 and 2017, Swedes gained 2.7 years of life, compared with 3.6 years for all EU citizens (Figure 1). The gender gap in Sweden has narrowed, as men have gained more years in life expectancy than women.

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



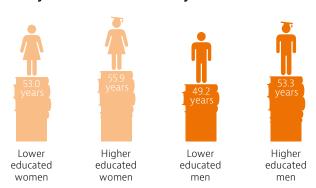
Source: Eurostat Database.

### Social inequalities in life expectancy exist, but are less pronounced than in many other EU countries

Life expectancy at age 30 for men with the lowest level of education was more than four years lower than for those with the highest level in 2016 (Figure 2). This gap was smaller among women (about three years). Although these education gaps in longevity are less pronounced than in many other EU countries, they have increased by 0.3 years for men and 0.1 years for women over the last decade.

This education gap can be explained at least partly by differences in exposure to risk factors and lifestyle, including higher smoking rates, poorer nutrition and higher obesity rates among people with low levels of education (see Section 3). It is also related to differences in income level and income standards, which affects exposure to other risk factors and access to care.

Figure 2. The education gap in life expectancy is four years for men and three years for women



Education gap in life expectancy at age 30:

Sweden: 2.9 years Sweden: 4.1 years EU21: 4.1 years EU21: 7.6 years

Note: Data refer to life expectancy at age 30. High education is defined as people who have completed tertiary education (ISCED 5-8) whereas low education is defined as people who have not completed secondary education (ISCED 0-2).

Source: Eurostat Database (data refer to 2016).

## Ischaemic heart disease remains the main cause of death, but mortality from Alzheimer is growing

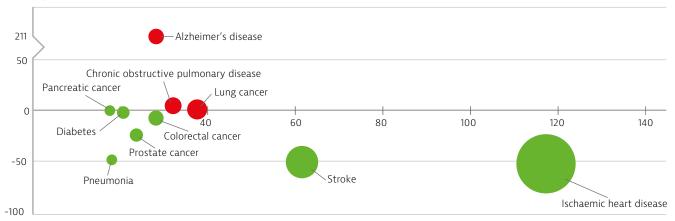
In 2016, ischaemic heart disease represented almost 15 % of all deaths in Sweden, but it had decreased substantially between 2000 and 2016 (Figure 3), partly because of the reduction in tobacco consumption (see Section 3). Stroke is still the second main cause of mortality, accounting for around 7 % of all deaths, despite also seeing a marked reduction since 2000.

At the same time, mortality rates from Alzheimer's disease have increased greatly since 2000, making it one of the leading causes of death. However, this strong increase is due largely to improvements in diagnosis and changes in death registration practices.

Lung cancer and colorectal cancer are the most frequent causes of death by cancer, and mortality rates for these two have stayed roughly stable since 2000, remaining below EU averages.

Figure 3. The leading causes of death are still ischaemic heart disease and stroke, but mortality from Alzheimer's disease has increased greatly

% change 2000-16 (or nearest year)



Age-standardised mortality rate per 100 000 population, 2016

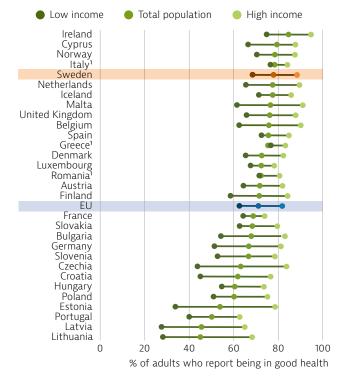
Note: The size of the bubbles is proportional to the mortality rates in 2016. The increase in mortality rates from Alzheimer's disease is largely due to changes in diagnostic and death registration practices.

Source: Eurostat Database.

### Most Swedes report being in good health, but there are disparities by income group

In 2017, more than three-quarters of people in Sweden (77 %) reported being in good health, a greater share than in the EU as a whole (70 %). However, as in other countries, people on lower incomes are less likely to report being in good health: only two-thirds (67 %) of Swedes in the lowest income quintile report being in good health compared to 87 % of those in the highest (Figure 4). This gap is similar to the EU average.

Figure 4. Inequalities in self-rated health by income level are similar to the EU average



Note: 1. The shares for the total population and the population on low incomes are roughly the same.

Source: Eurostat Database, based on EU-SILC (data refer to 2017).

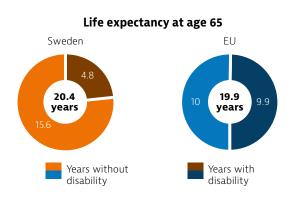
## Swedes live longer than before, but not all remain healthy in old age

The share of people aged 65 and over is steadily growing in Sweden because of rising life expectancy. In 2017, one in five people (20 %) in Sweden were aged 65 and over, up from 16 % in 1980; this is projected to reach one in four people (25 %) by 2050.

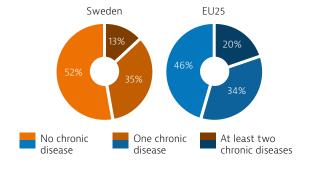
In 2017, Swedes aged 65 could expect to live slightly more than 20 years – an increase of about two years since 2000 – and most of these years are spent without disability (Figure 5).

While nearly half of Swedes aged 65 them reported in 2017 having at least one chronic condition, this does not necessarily hinder them from living a normal life and carrying on their usual activities. Most people are able to continue to live independently in old age; just over one in ten people aged 65 and over reported some limitations in basic activities of daily living, such as dressing and eating, that may require assistance. This proportion is much lower than the EU average and mainly concentrated among people aged over 80.

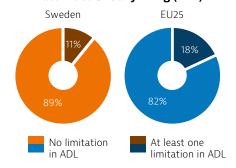
Figure 5. Nearly half of Swedes after age 65 have at least one chronic disease



### % of people aged 65+ reporting chronic diseases1



### % of people aged 65+ reporting limitations in activities of daily living (ADL)<sup>2</sup>



### % of people aged 65+ reporting depression symptoms<sup>3</sup>



Notes: 1. Chronic diseases include heart attack, stroke, diabetes, Parkinson disease, Alzheimer's disease, rheumatoid arthritis and osteoarthritis. 2. Basic activities of daily living include dressing, walking across a room, bathing or showering, eating, getting in or out of bed and using the toilet. 3. People are considered to have moderate depression symptoms if they report more than three depression symptoms (out of 12 possible variables).

Source: Eurostat Database for life expectancy and healthy life years (data refer to 2017); SHARE survey for other indicators (data refer to 2017).

## **3** Risk factors

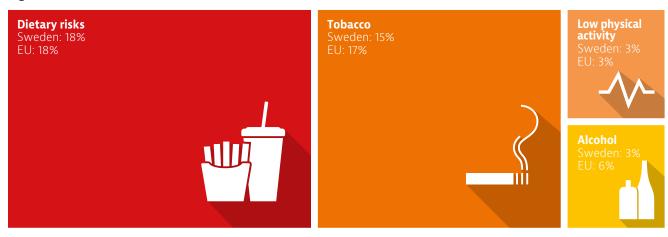
## Behavioural risk factors account for more than one-third of all deaths

Estimates suggest that more than one-third of all deaths in Sweden can be attributed to behavioural risk factors, including dietary risks, tobacco smoking, alcohol consumption and low physical activity (Figure 6; IHME, 2018).

Over one in six deaths (17 000) in 2017 can be attributed to dietary risks (including low fruit

and vegetable intake, and high sugar and salt consumption). Tobacco consumption (including direct and second-hand smoking) is still responsible for an estimated 15 % (over 14 000) of all deaths. About 3 % (2 900) are related to low physical activity and 3 % (2 800) can be attributed to alcohol consumption. The share of dietary risk and low physical activity in Sweden equals the EU averages, while the shares are below the EU averages for tobacco and alcohol, highlighting the success of public health policy in these domains.

Figure 6. More than one in three deaths in Sweden can be attributed to behavioural risk factors



Note: The overall number of deaths related to these risk factors (33 000) is lower than the sum of each one taken individually (36 000), because the same death can be attributed to more than one risk factor. Dietary risks include 14 components such as low fruit and vegetable consumption, and high sugar-sweetened beverages and salt consumption.

Source: IHME (2018), Global Health Data Exchange (estimates refer to 2017).

## Smoking among adults has decreased, but alcohol consumption remains a concern

About 10 % of adults in Sweden smoked daily in 2017, down from 14 % in 2010. The proportion of adults who smoke every day in Sweden is the lowest in the EU. These figures, however, do not include the use of other tobacco products. In 2016, 21 % of Swedish men and 4 % of women used snuff daily (NOMESCO, 2017). As with other tobacco products, the use of snuff increases the risk of ischaemic heart disease and stroke, as well as pancreatic, mouth and oesophageal cancers.

Alcohol sales and consumption have generally decreased over the past decade (Systembolaget, 2019), but one in five adults reported regular heavy alcohol consumption (binge drinking¹) in 2014, a higher proportion than in most EU countries (Figure 7). Regular binge drinking in Sweden is more than twice as frequent among men as among women – a pattern also observed in many EU countries.

Among adolescents, 13 % of 15- and 16-year-olds reported in 2015 that they had smoked in the previous month, much less than in most EU countries. The proportion of 15- and 16-year-olds who reported binge drinking at least once in the past month in 2015 was also among the lowest in the EU.

## Overweight and obesity among children and adults are growing

More than one in eight adults in Sweden (13 %) were obese in 2017, a rate that has grown over time but remains lower than in most other EU countries.

Child overweight and obesity rates are also growing. Nearly 20 % of 15-year-olds in Sweden were overweight or obese in 2013-14, a rate higher than the EU average (17 %). This rate increased substantially between 2001-02 and 2013-14.

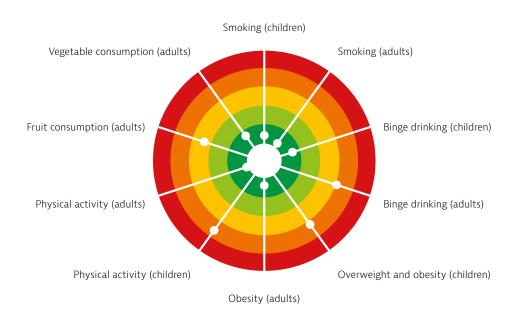
<sup>1:</sup> Binge drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults, and five or more alcoholic drinks for adolescents.

The proportion of Swedish teenagers who report engaging in at least moderate physical activity each day is lower than in most EU countries. This is particularly the case among teenage girls: only 10 % of 15-year-old girls in Sweden reported doing at least moderate physical activity in 2013-14 compared to 15 % s among 15-year-old boys.

### Social inequality contributes to health risks

Many behavioural risk factors in Sweden are more common among people with lower education or income. In 2016, one in seven adults (14 %) who had not completed secondary education smoked daily, compared to only 5 % among those with tertiary education (Folkhälsomyndigheten, 2018a). In the same vein, 65 % of adults without secondary education were overweight or obese, compared to only 44 % of those with higher education (Folkhälsomyndigheten, 2018b). This higher prevalence of risk factors among socially disadvantaged groups has a significant impact on health inequalities.

Figure 7. Child overweight and obesity and physical inactivity are growing public health issues in Sweden



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 ESPAD survey 2015 and HBSC survey 2013-14 for children indicators; and EU-SILC 2017, EHIS 2014 and OECD Health Statistics 2019 for adults indicators.

## 4 The health system

## The decentralised health service provides universal coverage

The 21 counties in Sweden have responsibility for financing, purchasing and providing health services. The national government is responsible for regulation and supervision. The regions are in charge of primary, specialist and psychiatric health care, while the 290 municipalities are responsible for elderly care, care for people with physical and mental disabilities, rehabilitation services, school health care, home care and social care. Health expenditure is mostly paid through local taxes, along with contributions from the national government via general grants, subsidies to the regions for outpatient medicines and specific national programmes (see Box 1).

The new government announced in January 2019 that a plan to reduce waiting times for elective surgery would be prepared in cooperation with the regional county councils (Government of Sweden, 2019). The government will also implement a primary care reform to strengthen primary care and improve working conditions for primary care providers, with special priority given to the provision of primary care in rural areas. Other priorities include strengthening emergency care, cancer care, maternity care, psychiatric care and suicide prevention.

The government will also introduce a national coordination body responsible for long-term planning of health personnel and skills supply (Government of Sweden, 2019).

## Health spending in Sweden is high, mostly funded from public sources

Sweden allocated 11.0 % of its GDP to health spending in 2017, the third highest share among EU countries and well above the EU average of 9.8 % (Figure 8). Sweden also has the third highest spending on health per person among EU countries, at EUR 3 872 in 2017 (adjusted for differences in purchasing power).

Public expenditure accounts for 84 %, which is considerably above the EU average (79 %). Most of the remaining health spending (15 %) is paid directly out of pocket by households, while voluntary health insurance only accounts for about 1 % of health spending (see Section 5.2). However, the number of people with private voluntary health insurance coverage is increasing rapidly, as this facilitates quicker access to consultation and care than using the public services.

### Box 1. Additional funding has been provided to improve access to care

In 2018, the government invested 1 billion kronor (EUR 100 million) to improve access to care, with the two main objectives of providing greater treatment guarantees in primary care and developing 'patient contracts', which are described as a coherent map of planned care that would contribute to:

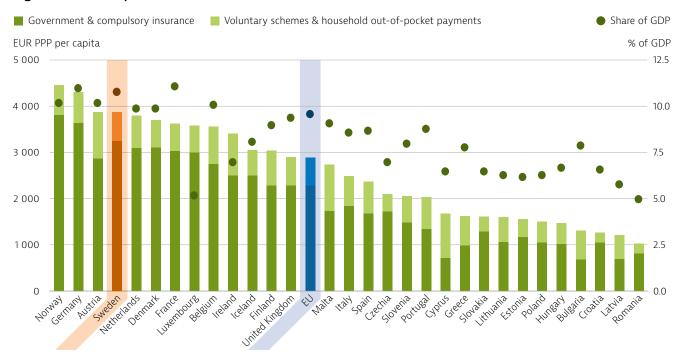
- increasing care coordination, treatment and prevention efforts for patients with multiple health care contacts;
- ensuring that all patients receive the care they need within a reasonable time;
- ensuring that patients get an overview of planned care so that they can follow the care initiatives step by step and ask questions;
- increasing collaboration between health care providers and between county councils and municipalities in care coordination and transitions.

## Outpatient care is the main category of health spending, followed by long-term care

The largest category of health spending in Sweden is outpatient care (including home care), which accounted for just over one-third (34%) of all health spending in 2017 (Figure 9). This reflects efforts over the past two decades to contain spending on hospital care while developing outpatient care. Spending on long-term care accounted for slightly more than one-quarter (27%) of all health spending, which is over twice as high as the EU average. Inpatient care (typically provided in hospitals) accounted for 22% of all health spending, a lower share than a decade ago and lower than the current EU average (close to 30%).

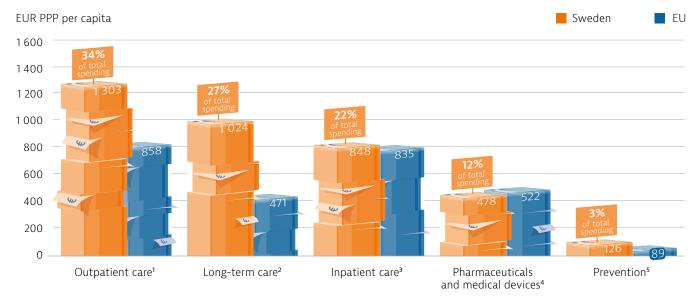
Expenditure on pharmaceuticals and medical devices takes up a smaller proportion of health spending (12 %) than the EU average (18 %). In Sweden, as in other EU countries, this only includes those dispensed outside hospital, not those purchased in hospital, which are reported under inpatient care (or outpatient care in hospital). The relatively low spending on pharmaceuticals dispensed outside hospital in Sweden is due partly to low prices for medicines (see Section 5.3), as well as fairly high use of generics.

Figure 8. Sweden spends more on health than most EU countries



Source: OECD Health Statistics 2019 (data refer to 2017).

Figure 9. Outpatient care and long-term care are the two main health spending items in Sweden



Note: Administration costs are not included. 1. Includes home care; 2. Includes only the health component; 3. Includes curative-rehabilitative care in hospital and other settings; 4. Includes only the outpatient market.

Source: OECD Health Statistics 2019; Eurostat Database (data refer to 2017).

## Population coverage is high and user charges vary across regions

The Swedish system provides coverage for all residents, regardless of nationality, while emergency coverage is provided to all patients from the EU/ EEA and via bilateral agreements. Services are either free or highly subsidised, with user charges set by the regions for primary and specialist care. For 2019, fees were 0-300 kronor (EUR 0-28) for a

primary care visit, 200-400 kronor (EUR 19-38) for a specialist visit and 100 kronor (EUR 9.5) per day of hospitalisation for an adult. User fees for medical consultations are capped at 1 150 kronor (EUR 109) per individual per year, as are prescribed medicines at 2 300 kronor (EUR 218). Exemptions from user charges apply for children, adolescents, pregnant women and older people.

## There are many private primary care providers, but most hospitals are publicly owned

Both public and privately owned health care facilities are publicly funded, and patients are covered by the same regulations and fees in public or private facilities. University hospitals provide highly specialised care, and public hospitals at the regional level provide the majority of acute care, while private hospitals also exist. Numbers of private primary care providers have expanded rapidly in recent years after the 2010 legislation on primary care choice reform, since they were given the right to receive public funding. The most recent report evaluating the 2010 primary care reform concluded that the average number of visits has increased, particularly among those in more affluent groups and with lower health care needs. The reform has, however, made integrated care for those with complex needs more difficult (Burström et al., 2017).

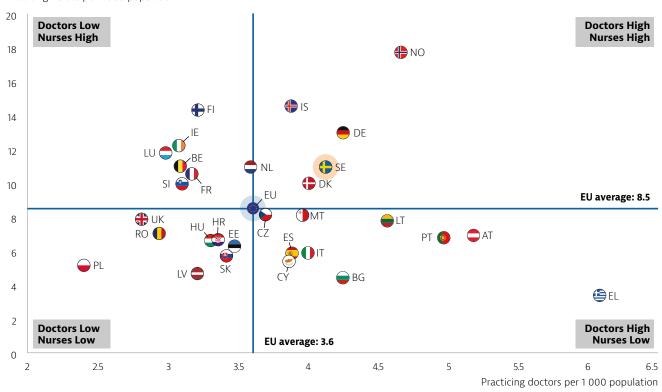
Public and private physicians (including hospital specialists) and other health workers are predominantly salaried employees.

## Sweden has a relatively high number of physicians and nurses

Sweden has a higher number of both physicians and nurses per population than the EU average, at 4.1 doctors per 1 000 population in 2016 (the EU average is 3.6) and 10.9 nurses per 1 000 population (the EU average is 8.5) (Figure 10). However, general practitioners (GPs) account for only one in seven physicians, so the density of GPs in Sweden (0.6 per 1 000 population) is one-third lower than the EU average (almost 1 per 100 000 population). The role of nurses in primary care has gradually expanded and now includes prescribing and care coordination (see Section 5.2).

Figure 10. Sweden has many doctors and nurses per population relative to other EU countries





Note: In Portugal and Greece, data refer to all doctors licensed to practise, 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 (the data for Sweden refer to 2016; for most other countries they refer to 2017).

## A waiting time guarantee aims to strengthen access to services

Swedish people are free to choose their primary care providers and contact specialists directly in most regions. Waiting time guarantees are designed to ensure that patients are able to contact a primary care centre the same day, to receive a medical

assessment in primary care within three days, to see a specialist within 90 days and to receive any necessary treatment/surgery within 90 days. When these thresholds for waiting times are exceeded, patients are offered care elsewhere, paid for by their region. Nevertheless, these waiting times thresholds are exceeded in many cases (see Section 5.2).

## 5 Performance of the health system

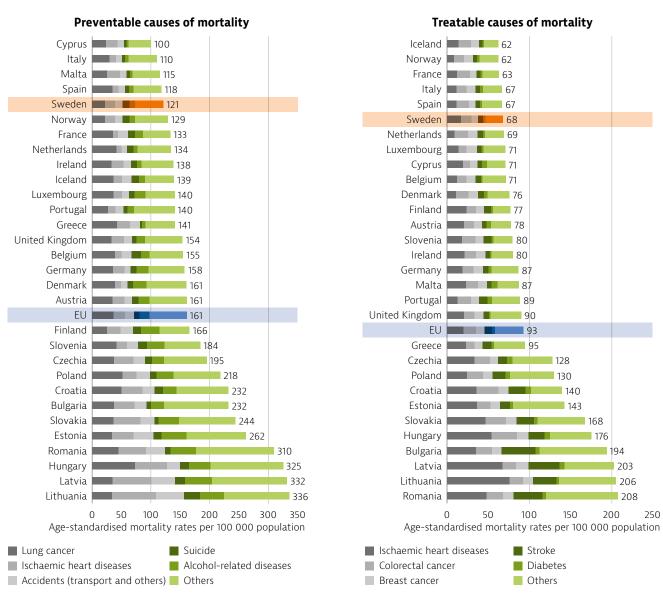
### 5.1. Effectiveness

## Low mortality from preventable and treatable causes indicates an effective health system

Sweden has low rates of mortality from preventable and treatable causes, which point towards an effective public health and health care system in avoiding deaths from conditions that are deemed to be preventable or treatable (Figure 11).

The low preventable mortality rate is largely due to low rates of premature deaths from cardiovascular diseases, alcohol-related causes and lung cancer. However, for accidental deaths and suicides, the Swedish rate of premature mortality is slightly above the EU average, indicating room for improvement.

Figure 11. Mortality from preventable and treatable causes is low



Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Mortality from treatable (or amenable) causes is defined as death that can be mainly avoided through health care interventions, including screening and treatment. Both indicators refer to premature mortality (under age 75). The data is based on the revised OECD/Eurostat lists.

Source: Eurostat Database (data refer to 2016)

## Sweden has a long tradition of public health policies to reduce risk factors

Sweden's low levels of preventable deaths for causes such as lung cancer, alcohol-related deaths and road traffic accidents can partly be explained by strong public health policies. Public awareness campaigns and high taxes on tobacco and alcohol 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 alcohol in *Systembolag*, the government-owned chain of alcohol stores.

Low mortality from traffic accidents is the result of a longstanding road safety strategy, called Vision Zero, which has as an ultimate goal that nobody should be killed or seriously injured in traffic accidents (Swedish Transport Authority, 2019). This strategy, adopted in 1997, includes the separation of opposing traffic lanes, a substantial extension of bike lanes and tight drink-driving restrictions. Approximately 250 people died in road accidents in Sweden in 2017, down from around 600 in 1997.

Reduction of health inequalities has been a long-term goal in Swedish public health policy. This objective was further emphasised in 2014 with a government policy statement to eliminate all avoidable health gaps between population groups within one generation. A Commission for Equity in Health was established in 2015 and presented its report in June 2017, highlighting the importance of a broad approach across many sectors of society beyond health care, to close health gaps in the population. A new law on public health policy was adopted in 2018 based largely on the results and recommendations from this Commission for Equity in Health; it includes eight target areas to promote greater health equity, along with follow-up evaluations.

In 2016, Sweden adopted a Comprehensive Strategy for Alcohol, Narcotics, Doping and Tobacco for 2016-20. Building on the previous strategy for 2011-15, the new strategy's overarching goal is a society free from illicit drugs, with reduced alcohol-related harm and reduced tobacco use. Progress in achieving these objectives is monitored through a set of indicators divided in five main targets: reduced access, postponed debut, reduced harmful use, increased access to care and social support and reduced numbers of deaths and injuries (Public Health Agency of Sweden, 2019).

In 2018, Sweden hosted a voluntary exchange under the State of Health in the EU cycle to discuss with national stakeholders and international representatives how to revitalise the commitment to health promotion and prevention in the health system (Box 2).

### Box 2. Sweden hosted a voluntary exchange on health promotion and prevention in June 2018

As part of the first State of Health in the EU cycle, the Swedish Ministry of Health and Social Affairs and the National Board of Health and Welfare hosted a seminar to discuss the revitalisation of health promotion and prevention in the Swedish health system in Stockholm in June 2018. Its main aim was to mobilise Swedish health care actors to put renewed emphasis on health promotion and prevention.

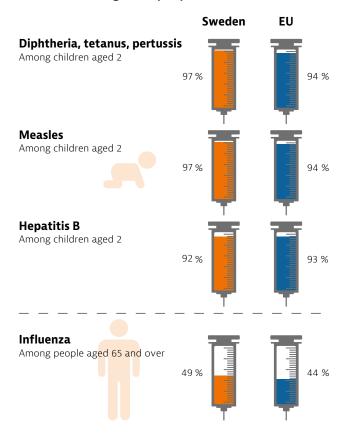
The voluntary exchange brought together approximately 70 policymakers, stakeholders and experts from Sweden, as well as from Belgium, France, Ireland and the United Kingdom. The OECD and the European Observatory on Health Systems and Policies facilitated the discussions. The seminar identified some practical next steps to overcome some of the main barriers to action and to enable greater commitment to health promotion and prevention. The Swedish Society of Medicine stressed the importance of putting more emphasis on health promotion in medical education and training programmes.

## Vaccination rates among older people could be improved

Sweden has a comprehensive and free of charge childhood vaccination programme. Vaccination rate for diphtheria, tetanus, pertussis and measles is above the WHO recommended target of 95 % (Figure 12). Since 2016, hepatitis B vaccination has also been recommended for all infants and been offered free of charge by most county councils. As a result, the vaccination rate has increased rapidly from 53 % in 2015 to 92 % in 2018, although there is substantial variation between county councils.

Only about half of Swedish people aged 65 and over were vaccinated against influenza in 2017, which is slightly higher than the EU average but well below the WHO recommended target of 75 %. Take-up has been stable at around 50 % in recent years. Increasing coverage has been challenging, partly due to complacency and a lack of confidence in influenza vaccines, as well as some access-related barriers.

Figure 12. Vaccination rate is high among children, but lower among older people



Note: The data refer to the third dose for diphtheria, tetanus and pertussis, and hepatitis B, and the first dose for measles.

Source: WHO/UNICEF Global Health Observatory Data Repository for children (data refer to 2018); OECD Health Statistics and Eurostat Database for people aged 65 and over (data refer to 2017 or nearest year).

## Hospitals generally provide high-quality acute care

In contrast with citizens in most other EU countries, Swedish people express a higher level of satisfaction with hospital and specialist care (which was given a rating of 7.8 out of 10) than with primary care (a rating 6.9), according to results from a Europe-wide survey in 2016 (Eurofound, 2017).

Based on clinical measures, hospitals in Sweden generally provide effective treatment for people requiring acute care for life-threatening conditions. This is notably the case for acute cardiovascular diseases. Sweden has low rates of 30-day mortality following hospital admissions for acute myocardial infarction and stroke, thanks to the development of specialised health facilities for the treatment of these conditions (Figure 13).

## Low rates of hospital admissions reflect a shift from inpatient to outpatient care

For several communicable or chronic diseases, admissions to hospital can be avoided through well-organised prevention and primary care. Admission rates for chronic diseases such as asthma and chronic obstructive pulmonary disease (COPD), diabetes and congestive heart failure are below the EU average (Figure 14), although some countries have even lower rates. These low rates in Sweden can be explained at least partly by the shift from inpatient to outpatient care, so that only patients with higher clinical needs are admitted, while others are managed in primary and outpatient care settings.

Figure 13. Mortality rates following hospital admission for acute myocardial infarction and stroke are low

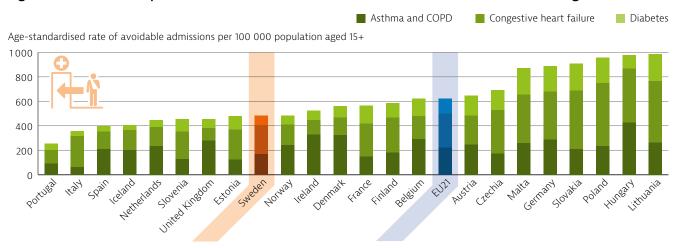
30-day mortality rate per 100 hospitalisations



Note: Figures are based on patient data and have been age-sex standardised to the 2010 OECD population aged 45+ admitted to hospital for heart attack (AMI) and ischemic stroke.

Source: OECD Health Statistics 2019 (data refer to 2017 or nearest year).

Figure 14. Avoidable hospital admissions for chronic diseases in Sweden are below the EU average



Source: OECD Health Statistics 2019 (data refer to 2017 or nearest year).

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

Survival following diagnosis for different types of cancer (breast, cervical, colorectal and lung cancer) has increased in Sweden over the past decade and is among the highest in the EU, reflecting earlier diagnosis and effective treatments (Figure 15).

Since the launch of the national cancer strategy in 2009, Sweden has put much effort in improving cancer care, and the new government in place since January 2019 also identified cancer care as a priority for new investment. While the strategy has a strong focus on quality and equity in treatment, it also targets prevention and early detection. All Swedish regions offer mammography screening for women aged 40-74, with a high level of coverage. Among women aged 50-69, 90 % reported that they had a breast examination in the past two years in 2014.

Cervical cancer screening is also rolled out nationally for women aged 23-59, with high uptake (82 % in 2016).

On the other hand, screening for colorectal cancer is not yet widely offered to men and women across the country, and only two of the 21 county councils provide screening for their residents aged 50-59. This explains why only 33 % of people aged 50-74 in Sweden reported ever having been screened in 2014, compared to the EU average of almost 50 %.

Despite generally good outcomes, cancer care has been criticised for long waiting times and a lack of people-centred care. The latest national reform in cancer care attempts to improve the patient experience by creating standardised pathways involving all stakeholders in the care process to minimise delays and uncertainty for patients.

Figure 15. Cancer survival rates in Sweden are above the EU average



Prostate cancer Sweden: 91 % EU26: 87 %



**Breast cancer** Sweden: 89 % EU26: 83 %



Colon cancer Sweden: 65 % EU26: 60 %



Lung cancer Sweden: 20 % EU26: 15 %

Note: Data refer to people diagnosed between 2010 and 2014. Source: CONCORD programme. London School of Hygiene and Tropical Medicine.

### 5.2. Accessibility

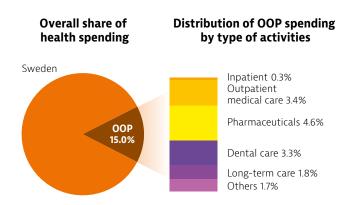
## The benefit package is broad, but some disparities still exist across regions

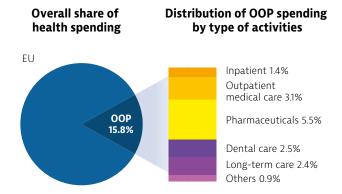
All residents in Sweden are automatically entitled to publicly funded health services, and the regulation of health service provision to new immigrants has also been improved. Even though Sweden has a broad benefit package and a health care law with a strong focus on equity and needs-based provision, the regional structure with 21 autonomous county councils leads to some disparities in service coverage rules in different parts of the country. To mitigate this structural problem, the National Board for Health and Welfare and the Swedish Association of Local Authorities and Regions work together to agree on common guidelines and strategies.

## Co-payment ceilings limit adverse effects of user fees, but cost barriers exist

Some 15 % of health spending in Sweden is funded by out-of-pocket (OOP) expenditure – slightly lower than the EU average. The fees are applied to almost all types of services and goods, with the exceptions for maternal and child health services provided in primary care settings and some services for people aged over 85. The regions set the fees independently, and the fee structure provides an incentive to consult primary care over hospital visits. Only the fees for prescribed medicines and dental services are set at a national level. Most OOP spending goes on pharmaceuticals, dental care and other outpatient care, as these services are generally less covered than hospital inpatient care (Figure 16).

Figure 16. Out-of-pocket spending is mainly on pharmaceuticals, dental care and outpatient care





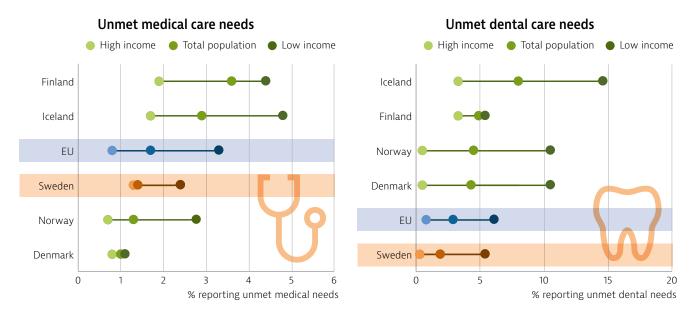
Source: OECD Health Statistics 2019 (data refer to 2017).

#### Unmet medical care needs are low

Some people report unmet care needs due to financial or non-financial barriers. Unmet medical care needs are low: 1.4 % of all respondents and 2.4 % of respondents on low incomes reported episodes of unmet needs for a medical examination or treatment

due to costs, distance to travel or waiting times in 2017. The percentage of people reporting unmet needs for dental care was about 2 % overall in 2017, but over 5 % among people in the lowest income group (Figure 17).

Figure 17. Unmet medical care needs are rare, but higher for dental care for people on low incomes



Note: Data refer to unmet needs for medical or dental examination or treatment due to costs, distance to travel or waiting times. Source: Eurostat Database, based on EU-SILC (data refer to 2017).

User fees for many services can have a rationing effect. National ceilings on fees are separate for care services, prescription medicines, health-related transport and medical aids, but counties have different methods to weigh reimbursement according to health care needs. Consequently, the total annual amount can be substantial for people on low incomes. In addition, dental care is not included in the benefit package and is subject to higher co-payments for adults above the age of 23. The government has commissioned an official inquiry, with the aim of proposing reforms to the dental care system, focusing on tackling inequalities. Its final report is expected to be delivered in 2020.

## Private health insurance is rapidly gaining popularity in Sweden

The number of people with private health insurance has increased rapidly in the last 15 years, with an estimated 10 % of the population aged 16-64 now thought to have supplementary health insurance, although the type of coverage and premiums vary substantially. This insurance is mostly employment based and mainly provides people with faster access to outpatient (ambulatory) visits and elective surgery, but often also includes health check-ups and other occupational health services. Although private health insurance coverage is still relatively marginal, it does raise concerns about equity in access to services.

## Waiting times continue to attract public attention

As in many other national health service systems, waiting times have been a longstanding feature of the Swedish health system and the problem has been subject to numerous debates and policy initiatives.

The most important policy initiative was the Health Guarantee Act of 2010, which stipulated maximum waiting times for different types of service. Other initiatives have included national programmes to incentivise regions to reduce queues (these incentives were abolished in 2015) and increase transparency by regularly publishing data on waiting times. This has been done both at the individual provider level, to help patients make informed choices, and at the national level, by comparing regions to put pressure on regional administrations. Regional differences in waiting times are large (European Commission, 2019a), and are generally lower in urban areas. While the vast majority of the population in the Stockholm region are able to consult a specialist and receive an intervention within 90 days following a specialist assessment, about 30 % of the population in the Northern region had to wait longer than 90 days to get access to these services in 2017 (Figure 18).

Norrbotten Norrbotten Vasterbotten Vasterbotten Vasternorrland Vasternorrland Jamtland Jamtland Gavleborgs Gavleborgs **Dalarnas** Uppsala Uppsala Vastmanlands Stockholms Vastmanlands Stockholms Varmlands **Varmlands** Orebro 18 Orebro Sodermanlands **Sodermanlands** Specialist consultation: Surgical intervention: Ostergotlands Ostergotlands Vastra Götalands Vastra Götalands % of people waiting % of people waiting at least 90 days at least 90 days **Jonkopings Jonkopings** Gotlands Gotlands Kalmar Kalmar < 15 < 15 Hallands Kronobergs 16 Hallands Kronobergs 14 6 15 - 24 15 - 24 Blekinge Blekinge > 24 > 24 Skane Skane

Figure 18. Waiting times for specialist consultation and treatment are longer in some regions

Source: Sveriges Kommuner och Landsting (2018; data refer to 2017).

Waiting times have increased in recent years for some services, especially for elective surgery. For knee replacement, while the share of patients waiting more than three months decreased sharply between 2010 and 2014, it then went up from 5 % in 2014 to 25 % in 2017. Similar trends have also occurred for cataract surgery and hip replacement, with the share of patients on waiting lists for more than three months more or less the same in 2017 as in 2010. The new government has committed to increasing efforts to reduce waiting times.

## Providing advanced training to more nurses could improve access to care and efficiency

Sweden has successfully increased the scope of practice of nurses in primary care, for example by setting up nurse consultations in lieu of GP consultations, helping to address the low supply of GPs and allowing registered nurses with additional training and sufficient experience to prescribe some medicines. In addition, some specialist nurses provide care to diabetes patients and support them in self-managing their condition. In hospital, registered

nurses with specific expertise in geriatrics are able to assess the health and long-term care needs of older people arriving in emergency departments.

However, the number of such advanced practice nurses and specialist nurses remains limited, and the number of new graduates with an advanced nursing degree and specialty training has fallen since 2005. In January 2019, the government announced a renewed effort to train more advanced practice and specialist nurses to improve timely access to care.

### 5.3. Resilience<sup>2</sup>

## Addressing the needs of the ageing population will continue to be a challenge

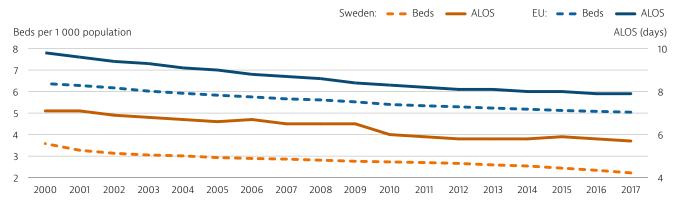
As in other EU countries, Sweden faces the challenge of responding to the growing health and long-term care needs of an ageing population in the coming decades. Budgetary pressures are projected to come not only from health care expenditure but also, and even more importantly, from long-term care expenditure. According to the latest projections from the European Commission's Ageing Working Group, public spending on long-term care in Sweden may grow by 1.7 percentage points of GDP between 2016 and 2070, while public spending on health may

grow by about 1 percentage point of GDP (European Commission-EPC, 2018). This highlights the challenge of responding efficiently to the growing needs of health and long-term care in the years ahead.

## Sweden has managed to shift large parts of care away from inpatient care

Over the past two decades, Sweden has worked consistently on moving services from inpatient to outpatient settings. As a result, it has the lowest number of hospital beds per population in the EU (2.2 beds per 1 000 population in 2017 – less than half the EU average of 5.0) and the average length of stay (ALOS) is also much lower than the EU average (Figure 19).

Figure 19. Numbers of hospital beds and average length of stay are low



Source: Eurostat Database.

However, bed occupancy rates are very high, raising concerns about patient safety, given the very limited margins to respond to emergencies in acute care hospitals and stressful working conditions. A national reporting system has recently been developed to monitor bed occupancy rates, with the aim of reducing any adverse effects (Sveriges Kommuner och Landsting, 2018).

The growing adoption of day surgery has helped to shift care from inpatient to outpatient settings and achieve substantial savings, with clinicians playing a lead role in this development (Box 3). A total of 2.7 million surgical interventions were carried out in 2013, an increase of over 1 million interventions compared to 2005 (European Commission, 2019b). Of these, 70 % were performed as day cases in 2013, compared to 42 % in 2005. Nonetheless, a 2016 review by the National Board of Health and Welfare pointed out that the full potential savings of day surgery had not yet been reached, as the share of day surgery still varied widely across the 21 county councils.

For example, the regional rates of day surgery for the removal of tonsils varied between 4 % and 94 % in 2013 (Tiainen & Lindelius, 2016).

### Box 3. Clinicians have played a leading role in the rapid diffusion of day surgery in Sweden

One of the main factors that has contributed to the steady expansion of day surgery in Sweden is clinical leadership in the adoption of evidence-based guidelines to streamline pre- and postoperative surgical procedures and the promotion of safe and effective use of day surgery. Nationwide collaboration and support from national authorities have helped to develop and disseminate new standards, while leaving sufficient autonomy to facilitate adaptation to local circumstances.

<sup>2:</sup> Resilience refers to health systems' capacity to adapt effectively to changing environments, sudden shocks or crises.

## Delayed discharges from hospital are an example of care coordination issues

The Swedish health system suffers from shortcomings in care coordination at different levels and in responding to patient expectations. Results from the 2016 Commonwealth Fund International Health Policy Survey showed that Swedish patients report negative experiences with care coordination more often than patients in the other ten countries participating in the survey (Commonwealth Fund, 2016). About one-third of respondents in Sweden declared they had experienced a problem with care coordination or communication problems, and half of patients reported experiencing a coordination gap in hospital discharge planning.

Delayed discharges for patients who no longer need to stay in hospital is an example of coordination issues. The number of bed days related to delayed discharges in 2016 was much higher in Sweden than in Denmark and Norway (Table 1).

Since 2018, new legislation has promoted more timely discharge from hospital by strengthening cooperation among the different actors in the system. This promotes better coordination between health care and social services following hospital discharge by creating safe and effective discharge processes. It outlines a formal discharge procedure, which begins at hospital admission. The law obliges regions and municipalities to enter into agreements on common guidelines for cooperation and planning discharges. Municipalities face financial penalties if they cannot reach an agreement to better manage and reduce delayed discharges.

Table 1. Delayed discharges use more bed days in Sweden than in Denmark and Norway

	Number of bed days	Bed days/1 000 population
Denmark	30 844	5
Ireland	201 977	43
Norway	82 411	16
Sweden	393 124	40
United Kingdom (England)	2 254 821	34

Source: Suzuki (forthcoming), Reducing delays in hospital discharge, OECD Health Working Papers (data refer to 2016).

## Monitoring and improving care for people with Alzheimer and other dementias

In 2018, about 7 % of the Swedish population aged over 60 were living with Alzheimer's disease and this proportion is expected to rise to 9 % by 2040 if the age-specific prevalence of dementia remains unchanged (OECD/EU, 2018).

In response to this growing burden, Sweden has developed registries to monitor both dementia and the behavioural and psychological symptoms of dementia (BPSD). The BPSD registry includes data from nursing homes and other care settings, allowing these establishments to monitor and adapt the quality of care. The dementia registry includes data from across the health system, including memory clinics, the majority of general practices and long-term care. The data collected include not only clinical information but also further indicators of quality of life.

# A number of initiatives to promote appropriate use of pharmaceuticals and access to new medicines have been launched

A number of initiatives have been pursued at the national and regional level to promote a more appropriate use of pharmaceuticals and greater use of generics, as well as to reduce their prices.

Generic substitution is mandatory. In addition, Sweden uses an approach of the 'preferred product of the month' and established a system of mandatory substitution for the lowest priced generic alternative for reimbursement, regardless of what the doctor has indicated on the prescription (WHO Regional Office for Europe, 2018).

To promote more appropriate prescribing, a 'Wise List' (Kloka Listan in Swedish) has been developed and expanded in the Stockholm metropolitan region since 2000 for use throughout the region. The prescribing recommendations are developed by a group of experts including physicians, clinical pharmacologists and pharmacists. The Wise List now recommends 200 medicines for treating common diseases in primary and hospital care and an additional 100 medicines for specialised care (WHO Regional Office for Europe, 2018).

A 2018 government investigation suggested several improvements in the governance, financing and pricing of medications to safeguard patients' opportunities to benefit from progress in pharmaceutical treatments. The Swedish, Finnish and Norwegian health technology assessment (HTA) authorities also agreed in 2018 to strengthen their collaboration in assessing new pharmaceutical products under the FINOSE initiative (Box 4).

### Box 4. Sweden joined a collaboration on health technology assessment of new pharmaceuticals

Launched in 2018, the overall objective of the FINOSE collaboration between the Finnish, Norwegian and Swedish HTA authorities is to assess the relative effectiveness of new pharmaceuticals and carry out economic analysis jointly. Following these joint assessments, each country will still have the flexibility to make final decisions regarding the reimbursement and prices of new pharmaceuticals, in accordance with their national context and regulations.

In practice, this collaboration allows companies to submit a single dossier to the three countries simultaneously and agree to sign a waiver on data sharing. A joint team across the three countries is then appointed to undertake the joint assessment. The outcome of this process is adoption of a single assessment report by the three agencies. FINOSE is currently a pilot project and will be assessed regularly to see whether it meets its stated objectives.

### Digital care is on the rise

According to the 2016 national plan, Sweden aims to become a world leader in exploiting the opportunities offered by digitisation by 2025 (Government of Sweden, 2019). National electronic health records have been the norm in Sweden since their introduction in 2009, and since the end of 2016, the use of digital care contacts via video conferencing and text messages – particularly in primary care – has grown rapidly. Digital contacts in primary care doubled during 2017 and currently 99 % of all prescriptions for medication are electronic.

However, expenditure on digital care only amounts to a small proportion of the budget in primary care. This recent rapid expansion has been largely driven by two private companies, which through agreements with one region have offered digital care to the whole population. National legislation – the Patient Act – has enabled this development, which in 2015 introduced free choice for outpatient care among the 21 counties.

A national recommendation for the pricing of digital care has been agreed, along with a minimum patient fee for such contacts. A government investigation is also exploring how the consumer choice system and the emerging digital care market in primary care should be regulated in order to improve equity.



## **6** Key findings

- Swedish people live longer than people in most other EU countries, although progress in life expectancy has been slower in Sweden than the EU average since 2000. The gender gap is relatively small, but socioeconomic disparities persist. Many years of life after age 65 are spent with one or more chronic diseases and some disabilities.
- Some important risk factors to health like smoking and alcohol drinking are generally low in Sweden, but overweight and obesity are growing public health issues among adolescents and adults. Almost one in five 15-year-olds are overweight or obese, and almost one in eight adults are obese, up from one in eleven in 200<mark>0. M</mark>any risk factors are more prevalent among populations with lower income or education, contributing to socioeconomic disparities in health and life expectancy. In 2014, the government set a goal to eliminate avoidable health status gaps between population groups within one generation. This has been followed up by the adoption of a new public health policy in 2018, aiming to facilitate the implementation of actions in eight target areas and to evaluate progress.
- The decentralisation of the Swedish health system into 21 counties contributes to regional differences in access to care and outcomes, which goes against Sweden's aim of health equity. To mitigate these disparities, a new redistribution system has been suggested to ensure a more equitable distribution of resources across regions. Additional funding is available for targeted programmes. The new government announced a broad primary care reform, including plans to reduce regional disparities and improve access in rural areas.

- Sweden allocates a large amount of money to health, with spending per capita and as a share of GDP the third highest among EU countries. However, the country spends comparatively little on hospital inpatient care, focusing instead on outpatient care and long-term care. This reflects deliberate strategies over the past two decades to move care from hospitals to primary care or community care as much as possible.
- Sweden has relatively high numbers of doctors and nurses, but problems persist with recruiting staff, particularly in rural areas.
   Only 15 % of doctors are general practitioners, restricting timely access to primary care.

   Some effective task-sharing between nurses and doctors has been implemented in primary care, with nurses playing a greater role, for example, in managing chronic diseases.
   However, the lack of advanced practice and specialist nurses hampers greater task-sharing in primary care and in hospitals.
   In January 2019, the government announced a plan to train more specialist nurses and to strengthen the role of assistant nurses.
- Waiting times for health services are a longstanding issue and are increasing in some cases. For example, about 20 % of patients were on waiting lists for cataract surgery for over three months in 2018, up from 10 % in 2013. The new government announced its intention to allocate more money to reducing waiting times for elective surgery and other health services. Another important challenge is to improve care coordination and the timeliness of services for patients with cancer, mental illness, Alzheimer's disease and other dementias.

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### **Country abbreviations**

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovakia	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT	United Kingdom	UK



# **State of Health in the EU**Country Health Profile 2019

The Country Health Profiles are an important step in the European Commission's ongoing State of Health in the EU cycle of knowledge brokering, produced with the financial assistance of the European Union. The profiles 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, in cooperation with the European Commission.

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/EEA country. The aim is to create a means for mutual learning and voluntary exchange that can be used by policymakers and policy influencers alike.

Each country profile provides a short synthesis of:

- · health status in the country
- the determinants of health, focussing on behavioural risk factors
- the organisation of the health system
- the effectiveness, accessibility and resilience of the health system

The Commission is complementing the key findings of these country profiles with a Companion Report.

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