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Health system review

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Sweden

Health System Review 2023

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PREFACE

The Health Systems in Transition (HiT) series consists of country-based reviews that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each review is produced by country experts in collaboration with the Observatory's staff. In order to facilitate comparisons between countries, reviews are based on a template prepared by the European Observatory, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a report.

HiTs seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe and other countries. They are building blocks that can be used to:

- learn in detail about different approaches to the organization, financing and delivery of health services, and the role of the main actors in health systems;
- describe the institutional framework, process, content and implementation of health care reform programmes;
- highlight challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries; and
- assist other researchers in more in-depth comparative health policy analysis.

Compiling the reviews poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including data from national statistical offices, the Organisation for Economic Co-operation and Development (OECD), the International Monetary Fund (IMF), the World Bank's World Development Indicators and any other

relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate review.

A standardized review has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages because it raises similar issues and questions. HiTs can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situations. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to contact@obs.who.int.

HiTs and HiT summaries are available on the Observatory's website (www.healthobservatory.eu).

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The HSPM is an international network that works with the Observatory on Country Monitoring. It is made up of national counterparts that are highly regarded at national and international level and have particular strengths in the areas of health systems, health services, public health and health management research. They draw on their own extensive networks in the health field and their track record of successful collaboration with the Observatory to develop and update the HiT.

This edition was written by Nils Janlöv, Sara Blume, Anna H. Glenngård, Kajsa Hanspers and Anders Anell. Beatrice Onn, also contributed in the early stages of the work.

It was edited by Sherry Merkur (European Observatory on Health Systems and Policies). The basis for this edition was the previous Sweden HiT, which was published in 2012, written by Anders Anell, Anna H. Glenngård and Sherry Merkur.

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Thanks are extended to the WHO Regional Office for Europe, the Organisation for Economic Co-operation and Development, the World Bank and the European Commission for their data on health, health expenditure and health care services in Europe.

The HiT uses data available in February 2023, unless otherwise indicated. The HiT reflects the organization of the health system and the data availability, unless otherwise indicated, as it was in February 2023.

The European Observatory on Health Systems and Policies is a partnership, hosted by the WHO Regional Office for Europe that includes the Governments of Austria, Belgium, Finland, Ireland, the Kingdom of the Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy (with Agenas); the French National Union of Health Insurance Funds (UNCAM); the Health Foundation; the European Commission; the London School of Economics and Political Science (LSE); and the London School of Hygiene & Tropical Medicine (LSHTM). The Observatory is composed of a Steering Committee, core management team, research policy group and staff. Its Secretariat is based in Brussels and it has offices in London at LSE and LSHTM and in Germany at the Berlin University of Technology. The Observatory team working on HiTs is led by Josep Figueras, Director; Elias Mossialos, Martin McKee, Reinhard Busse (Co-directors); Ewout van Ginneken and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Anna Maresso. The production and copy-editing process was coordinated by Jonathan North, with support from Lucie Jackson, Lesley Simon (copy-editing) and Steve Still (typesetting).

LIST OF ABBREVIATIONS

ACG	a measure of overall illness that quantifies morbidity by grouping individuals based on Age, Gender and Constellation of diagnoses over a defined time period
ADL	Activities of Daily Living
AMI	acute myocardial infarction
AHCSA	the Swedish Agency for Health and Care Services Analysis (*Myndigheten för vård- och omsorgsanalys*)
CHF	congestive heart failure
CNI	a measure of social deprivation related to seven factors: 65+ and living alone, born abroad (Eastern Europe, Asia, Africa and South America), unemployed 16–64, single parent with children <17, person 1 year or older who moved into the area, low-educated 25–64 and age younger than 5 years
COPD	chronic obstructive pulmonary disease
CT	computed tomography
DRG	diagnosis-related group
EEA	the European Economic Area
EHA	Swedish eHealth Agency (*e-hälsomyndigheten*)
EU	the European Union
EU27	European Union 27 Member States as of 2020
EU-SILC	EU Statistics on Income and Living Conditions
FORTE	the Research Council for Health, Working Life and Welfare (*Forskningsrådet för hälsa, arbetsliv och välfärd*)
FFS	fee-for-service
GDP	gross domestic product
GP	general practitioner
HSAN	the Health Care Liability Committee (*Hälso- och Sjukvårdens Ansvarsnämnd*)
HiT	Health Systems in Transition
HSL	Health and Medical Services Act (*Hälso- och sjukvårdslagen*)
IADL	Instrumental Activities of Daily Living
IT	information technology
IVO	Health and Care Inspectorate (*Inspektionen för vård och omsorg*)
MFD	the Swedish Agency for Participation (*Myndigheten för delaktighet*)
MFoF	the Family Law and Parental Support Authority (*Myndigheten för familjerätt och föräldraskapsstöd*)
MPA	the Medical Products Agency (*Läkemedelsverket*)
MRI	magnetic resonance imaging

NBHW	the National Board of Health and Welfare (*Socialstyrelsen*)
NKS	New Karolinska Solna (*Nya Karolinska Solna*)
NPÖ	the national patient overview (*nationell patientöversikt*)
NT-council	Council on New Therapies (*NT-rådet*)
OECD	the Organisation for Economic Co-operation and Development
OOP	out-of-pocket
P4P	pay for performance
PCC	primary care centre
PHA	the Public Health Agency of Sweden (*Folkhälsomyndigheten*)
SALAR	Swedish Association of Local Authorities and Regions (*Sveriges Kommuner och Regioner*)
SBU	Swedish Agency for Health Technology Assessment and Assessment of Social Services (*Statens beredning för medicinsk och social utvärdering*)
SEK	Swedish Krona
SIA	Swedish Social Insurance Agency (*Försäkringskassan*)
SOU	Swedish Government Official Reports (*Statens offentliga utredningar*)
TLV	the Dental and Pharmaceutical Benefits Agency (*Tandvårds- och Läkemedelsförmånsverket*)
US$ PPP	US dollars adjusted for differences in purchasing power
VHI	voluntary health insurance
WHO	the World Health Organization

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ABSTRACT

This analysis of the Swedish health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance. The analysis shows that Swedish life expectancy is very high. There are, however, health gaps across different socioeconomic groups and regional areas. Health care is a universal welfare service, and covers almost everyone who lives or works in Sweden. Expenditure on health was 11.4% of GDP in 2020, with high public financing (86%) and public provision (83%). There is a high number of doctors and nurses, but shortages of general practitioners and specialist nurses. Responsibility for health care services is delegated to the 21 regions and the 290 municipalities and geographical differences in how services are organized and delivered exist. There is a mandatory freedom of choice system in primary care since 2010 and freedom of choice nationally in outpatient care since 2015, and here a new supply of private digital health care providers acting on a national basis has emerged since 2016. Ongoing reforms have been directed at strengthening the primary care sector and emphasize quality, prevention and person-centred services. Specialist care reforms have focused on the implementation of evidence-based and standardized care processes and the concentration of services at both national and regional levels. Overall, the Swedish health system has low levels of unmet need, low preventable and treatable mortality, good medical quality and low avoidable hospital admissions. A majority of Swedish patients are satisfied with the quality of care that they receive, but a lower share experience primary care as person-centred in international comparisons. Waiting times also remain a challenge such that first visits to specialized care and for treatment or surgery can be longer than the waiting guarantee limit. A major policy goal is to increase overall health system efficiency through developing and strengthening primary care (as above), changing the financial incentives to providers, substituting between staff categories, and implementing digitalization. Further debates concern how governance and management can support collaboration across regions and municipalities, and the integration of the National System for Knowledge-driven Management into existing governance structures.

EXECUTIVE SUMMARY

Sweden's growing and ageing population along with increased prevalence of chronic diseases pose challenges for the health care system

Since 1995, the Swedish population has increased by approximately 20% to above 10.4 million in 2021. Immigration has been the main reason behind this growth, especially between 2010 and 2020. The percentage of the population aged 65+ is increasing, but at a lower rate since 2015, mainly due to increased net migration. In 2021, 82% of the population aged 65+ had a chronic disease. Even though age-related mortality for the most common causes is comparatively low, these demographic changes pose challenges for the health care system, especially as people with chronic diseases account for 80–85% of total health care costs.

Life expectancy in Sweden is among the highest in the world – 84.8 years for women and 81.2 years for men in 2021. In comparison with many other countries, life expectancy among Swedish men stands out more favourably than among Swedish women. As in other European Union (EU) countries, average life expectancy has increased steadily apart from a small decrease during the COVID-19 pandemic. There are however health gaps, both in life expectancy and self-rated health status, across different socioeconomic groups. While women in Sweden live longer than men, the percentage of women that state that their health is good is slightly lower than among men. It is also more common for women to have chronic conditions.

The most common causes of death for both men and women in 2021 was diseases of the circulatory system and cancer, corresponding to more than half of all deaths. Compared with the EU average, Sweden had lower mortality from circulatory diseases and cancer in 2017 at 307 and 230 deaths per 100 000 inhabitants compared with the EU average of 368 and 252 per

100 000, respectively. Mortality from circulatory diseases has been reduced significantly over the last 40 years, which is one of the major contributors to the rise in life expectancy. Mortality due to cancer has decreased by 27% among men and 17% among women over a 20-year period but the age-adjusted incidence of cancer has increased by about 40% since the 1970s. However, the prevalence of mental health issues is increasing; about half the cases of ongoing sick leave are due to depression and anxiety. The most important risk factors affecting health status relate to unhealthy living habits, such as tobacco use and unhealthy eating habits.

The health care system is decentralized to the regions and municipalities, but overall policy and high-level oversight are national responsibilities

The main responsibility for health care services in Sweden is delegated to the 21 regions and the 290 municipalities to provide good, equal and needs-based care to the population. Geographical differences in how health care services are organized and delivered exist.

The main responsibility for financing, organizing and providing health care lies with the 21 regions. Within each region, the health care system is integrated to a high degree. Almost all hospitals are owned and operated by the regions, but the public–private mix of outpatient providers differs substantially across regions. The responsibilities of municipalities include financing, organizing and providing health care in ordinary and special housing for elderly people and people with functional impairments (except for health care provided by physicians) and health care in schools. The municipalities are responsible for approximately 25% of the health care expenditures.

All three levels of government are involved in health systems governance. At the national level, the Ministry of Health and Social Affairs with support from national government agencies is responsible for overall health care policy and high-level oversight. The national level steers and influences public health policy through legislation and regulations, supervision and financial incentives in the form of general or targeted government grants. At the local level, regions and municipalities are required to set priorities based on population needs and translate priorities into overall political decisions while also considering system constraints (for example, available resources). Regions also allocate resources

and responsibilities across health care providers, monitor provider activities and hold them to account for their performance. Priority setting and decisions on resource allocation to providers are made by boards, consisting of elected politicians, which have designated responsibility for health care.

Health care expenditure is comparatively high and universal coverage applies

Total health care expenditure accounted for 11.4% of Sweden's gross domestic product in 2020, ranking Sweden fourth in the EU. Besides a significant increase in relative spending due to the COVID-19 pandemic in 2020 (+0.6 percentage points), the share has been fairly stable since 2013. Moreover, health care is a universal welfare service, with predominantly public financing (86%) and public provision (83%), and covers almost everyone who lives or works in Sweden. The level of public spending is only exceeded by Czechia and Luxembourg in the EU.

Public expenditures are funded through taxes and both the regions and the municipalities levy proportional income taxes on their respective populations. However, financing by local taxes is supplemented by the national government grants and by user charges. Broken down by government body; national government spending in 2020 (including direct spending on certain national programmes and investments and indirect spending in the form of a general equalization grant and a targeted prescribed medicines grant) is 25%, regional spending is 42% and municipality spending is 19%. National government funding has increased significantly since 2015, especially during the pandemic year 2020. Private health financing represented about 14% of current health expenditure in 2020 where the majority (93%) came from households' out-of-pocket (OOP) payments. The proportion financed via OOPs has decreased over the last 10 years, especially during the pandemic. But even before the pandemic, financing via OOPs was about 1% lower in Sweden than the EU average. Voluntary health insurance has mainly a complementary role in the publicly financed system, representing less than 1% of total health expenditures in Sweden and about 4% of private expenditures.

The Swedish health care system is generous in terms of both breadth and scope, as coverage is based on registered residence and all cost-effective treatments should be included; however, there is no predefined benefits

package. Rather the Health and Medical Services Act states that responsible health care authorities are obliged to provide care on the basis of need to all residents.

Patient fees are charged for almost all types of services and medical products, except, for example, child and maternity care, dental care up to 24 years and a wide range of services for people aged 85+. For physical visits and treatments within outpatient care, patients pay flat-rate fees up to a maximum ceiling of 1 300 Swedish kronor (SEK) 1 300 [117 euros (EUR)] per 12-month period. The level of private cost-sharing is higher for pharmaceuticals, dental care and technical devices. However, for prescribed pharmaceuticals within the National Drug Benefit Scheme, the share of co-payment decreases up to a maximum cost of SEK 2 600 (EUR 234) over a 12-month period. There is also a co-payment scheme for dental care such that the state covers part of the cost according to the reference price list above SEK 3 000 (EUR 279). As a result, there are relatively few people who forgo care due to patient fees, but this is more common regarding dental care.

Payment mechanisms are mainly delegated to local governments and variations exists

The use of market mechanisms and contract-based governance have become the prevailing system within primary care following the 2010 primary care choice reform. Here the main form of payment mechanism is risk-adjusted capitation for listed patients, where capitation follows the patients' choice of provider. The proportion of capitation varies between the regions, but generally includes risk adjustments for the age-structure, overall illness, social deprivation and geographic location of the primary care centre (PCC).

Within specialized somatic care, global budgeting has historically been the basis for provider payment. This is also the most common form of payment for publicly owned hospitals or specialist clinics. Diagnosis-related group-based compensation is only used exceptionally, and its role has decreased within hospital payment. In comparison with primary care, pay for performance-related payment is less common in specialized care.

There is a high number of doctors and nurses, but shortages of GPs and specialist nurses

Sweden has a comparatively high number of both doctors and nurses per capita in the EU, about 430 practising physicians and 1 085 practising nurses per 100 000 inhabitants in 2019. Despite an overall increase in the number of physicians since 2000, several regions report a shortage, particularly of general practitioners (GPs). Furthermore, the share of physicians specializing in general practice is lower in Sweden than in comparable countries. The number of registered nurses per capita has gone down since 2015 and regions report a shortage of registered nurses, in particular for nurses with specialist competence.

There are large geographical differences in the number of health workers per inhabitant, particularly for GPs, which varies between 55 and 65 per 100 000 inhabitants among the regions. The number of vacancies relative to total employment in primary care is also higher in rural areas. The regions have responsibility in planning physical and human resources. The lack of national planning may cause inefficiencies, such as an inadequate supply of certain specialties, such as GPs, and regional imbalances.

The number of hospital beds per capita is the lowest within the EU

There were approximately 190 hospital beds per 100 000 inhabitants in Sweden in 2019. The number of hospital beds has decreased continuously since the 1970s – a trend similar to the EU average – which reflects a common development in medical technology, decreasing length of stay and shifting towards outpatient and primary care. In addition, institutional factors such as a comparatively comprehensive provision of care in ordinary and special housing for elderly people and persons with functional impairments may explain the Swedish development. However, evaluations show that the number of hospital beds is insufficient, and increasing them has been difficult mainly due to challenges in recruitment and retention of the required staff. The situation has generated attention at the national level and the government has recently expressed ambitions to increase the number of hospital beds by setting standards.

Primary care provision is characterized by free choice of provider

The regions and municipalities have a shared responsibility for primary care. The regions finance and govern primary care for the general population in PCCs, community emergency centres and child and maternal health care, whereas the municipalities finance and provide basic nursing health care for patients that receive social services, health care in the home for example, for elderly individuals and patients that have been discharged from hospitals and require further municipality care.

Sweden has a nationally regulated freedom of choice system with free establishment within regional primary care. The choice system is administered by the 21 regions, and regions are entitled to decide independently on the PCCs' scope of responsibilities as well as conditions regarding payment systems. All providers that meet the regions' requirements have the right to receive compensation from the region when providing care according to a common agreement. Another common element of primary care is PCCs employing several health care professions beside GPs. The main differences concern the scope of services included in the choice system and the organizational integration of regional health care and municipal health and social care.

The gate-keeping role of primary care as well as access to outpatient specialized care varies between regions. However, patients are always free to seek primary care and outpatient specialized care without geographical restrictions.

Inpatient care is being shifted towards outpatient care and day care

Sweden has a long history of investment in inpatient care, which has contributed to good medical quality and professional specialization. Since the mid-1990s, there has been an increased focus on a shift from hospital inpatient care towards outpatient care and day care, and concentration of highly specialized care together with emphasis on separating emergency care from elective care. The decreasing number of hospital beds is to some extent a sign of increased efficiency and technical innovation, but overcrowding in hospitals has also increased since 2014.

There is no specific regulation stating the task of emergency care and the regions may (within certain limits) adapt emergency care in the way they deem appropriate and effective. However, emergency care is to some extent specialized and concentrated and there is a systematic division of responsibilities between hospitals. For trauma, serious and critical conditions, patients are often redirected to regional/university hospitals. This development is part of the reform concentrating highly specialized care, which is seen as essential because several of the regional hospitals have a relatively small population base and limited scope for medical specialties.

The municipalities are responsible for long-term care services for elderly people and people with functional impairments

Sweden has a comprehensive, publicly financed long-term care system and national policy promotes care in a home setting over institutionalized care. The responsibility for means testing, financing and organizing long-term care services for elderly individuals and people with functional impairments lies with the municipalities. In general, receiving long-term care requires a needs-assessment, except for services such as security alarms and some home care. The Social Services Act is a framework law emphasizing the right of individuals to receive public services such as special housing or help at home according to needs at all stages of life. Children and adults with extensive functional impairments are also entitled to support according to a specific act.

Dental care differs from the rest of the health care system

Dental care is provided by public and private operators in a competitive market. Two thirds of adult dental care within the general allowance is conducted at approximately 3 550 clinics run by the 2 000 private care providers. Financing of dental care for those above 24 years of age differs from the rest of the health care system, as the majority is financed OOP by households and pricing is free, although the Dental and Pharmaceutical Benefits Agency (*Tandvårds- och Läkemedelsförmånsverket*) determines the reference prices for different treatments.

Improving patient choice and availability have been the objectives of recent reforms

Improving availability was an explicit policy goal with the choice reform in primary care that became mandatory in January 2010. The number of PCCs increased in the early phase of the reform and availability improved. However, the development stagnated in the middle of the decade and problems of insufficient availability and continuity persist. There have also been signs of negative effects on the geographical location of PCCs and equality of care, in terms of the distribution of care consumption. A lasting impact is that the share of private PCCs had increased to 44% in 2020, compared with 26% in 2007. However, large differences in privatization exist across regions.

A specific Patient Act was introduced in 2015, including a new right offering citizens free choice of primary care and outpatient specialized care nationally. The new option had unexpected consequences in terms of the establishment of new private digital health care providers with public financing. Digital health care providers located in any of the 21 regions have since offered instant video contacts throughout the country. The growth of digital health care providers picked up during 2016–2017 and was further fuelled during the pandemic, causing debate about increased expenditures and priorities not following a needs-based and cost-effective approach.

Strengthening the primary care sector remains a priority

Historically, health care in Sweden has been centred around the specialized hospital sector and primary care is often rated lower than specialized care in patient experience and trust. Since the 1970s, there have been several efforts to reform the health care system towards a larger scale and scope of primary care. In recent years, the national level and regions have agreed on a reform agenda with the aim of transforming the health care system, increasingly moving care from the hospital sector to primary care. Since 2016, ongoing reform efforts have been directed at strengthening the primary care sector in general. A new act that clarified planning responsibilities when discharging patients from hospitals was introduced in 2018. The same year, the national government also initiated targeted funding to support the development of a new primary care system aimed at providing good quality care with an emphasis on prevention

and person-centred services as close as possible to where people live. Integrated parts of the reform agenda are to clarify the responsibility of primary care, to foster increased collaboration between regional and municipal health care, and to establish PCCs as the first point of contact for citizens. From the perspective of the population, problems related to weak availability and continuity persist. The share of citizens that have a regular doctor in primary care is still low compared with most other EU/European Economic Area countries.

Improvement and concentration of specialist care is ongoing

Reform themes in specialist care have focused on the implementation of evidence-based and standardized care processes and on further concentration of services both at national and regional levels since 2012. An important example is that the six regional cancer centres established by the national government in 2010 received continued government support after 2012, for example, for implementation of standardized clinical pathways with inspiration from Danish cancer care. A more recent example is the establishment of the national collaboration for knowledge-driven management, a collaboration between the 21 regions, aiming at equitable access to evidence-based high-quality care throughout the country. The work is organized in 26 national programme areas focusing on different disease areas and one primary care advisory board.

An example of increased concentration of care is the new act in 2018, which specified that national specialized medical care can be performed at a maximum of five health care units that are required to meet certain criteria to provide the best possible care. The final decisions are now taken by national authorities rather than, as previously, by a board of regional representatives. This change should be seen against previous criticism of slow progress and benefits of concentrating care to high-volume providers. Highly specialized care only concerns selected areas and small volumes of patients, however; examples include liver, lung and heart transplantation.

Future developments will probably include continued discussion on a more decisive role for the national government where transfer of responsibilities from the regions to the national level is debated. Although there is general agreement on problems and overall challenges, opinions about solutions and the preferred form of governance at national and local levels vary. Signs of

a more active and decisive role of national actors, such as Health and Care Inspectorate (*Inspektionen för vård och omsorg*) and the National Board of Health and Welfare (*Socialstyrelsen*), within the existing governance structure, may be seen.

Unmet need is low, but waiting lists pose an ongoing challenge

Unmet needs for health care due to costs or distance are very low in Sweden, but higher than the EU average with respect to waiting times. Although long waiting times are not a new challenge within the Swedish health system, the share of patients receiving a first visit or surgery or other planned treatments within the national care guarantee has been decreasing yearly during the past decade, regardless of financial investments and policy efforts, such as the establishment of a statutory care guarantee, especially following the COVID-19 pandemic. In 2021, 29% of patients had been waiting for a first visit in specialized care for longer than the waiting guarantee limit of 3 months; this was 46% for treatment or surgery. The regional variations in waiting times are also large.

The share of households that experienced catastrophic spending is also low in Sweden from an international perspective. However, it is somewhat more common to have refrained from dental care than from health care in general due to costs. Factors that contribute to financial protection in Sweden include the availability of a comprehensive range of publicly financed health services for adults, and free access to all covered health services for children and adolescents, supported by high levels of public spending on health.

Swedish health care performs well in comparisons of medical quality and avoidable hospital admissions but less well in person-centred care

The measures of medical health care quality are generally high in Sweden and show a positive trend. This conclusion applies both to health care in general and as related to specific conditions. Since 2008, the number of patients being admitted to hospitals for diabetes, chronic obstructive pulmonary disease

(COPD), asthma, or congestive heart failure and hypertension has decreased by more than one third. The rate of avoidable hospital admissions for asthma and COPD per 100 000 inhabitants has decreased from 204 in 2010 to 156 in 2019, and is lower than in comparable countries such as Denmark, Norway and the Kingdom of the Netherlands. Survival in cancer and diagnoses such as acute myocardial infarction and stroke has also improved. In comparison with other EU countries, Sweden is also highly ranked in preventable and treatable mortality and performs better for both measures than, for instance, Denmark, Finland and the United Kingdom. The gap in treatable mortality between groups in the population is also relatively small.

A majority of Swedish patients are satisfied with the quality of care that they receive. However, a lower share of patients experience primary care as person-centred in Sweden than in, for instance Norway, the Kingdom of the Netherlands and Germany. This is likely to be a consequence of the comparatively weak primary care system. The fragmented health care system also shows difficulties in the handling of patients with multiple conditions and with transitions of patients between different providers and levels of care, and Swedish patients are comparatively less satisfied with the coordination of care than their European counterparts. There is also unwarranted variation in availability of care and health outcomes between socioeconomic groups and between geographical regions.

Improving efficiency is a major health policy goal

The low rate of treatable mortality indicates that the Swedish health care system is effective at an overall system level. However, health care costs are high in comparison with many other countries. Sweden also performs relatively well when it comes to process measures of technical efficiency, for example, average length of stay in a hospital, day-case surgery rates and levels of generic substitution of pharmaceuticals. However, when it comes to other input and cost-related measures, for example, staff turnover, sickness absence rates and use of staff, Swedish health care performs less well.

A major policy goal is to increase overall health system efficiency. The ongoing effort to develop and strengthen the primary care sector is seen as an important contribution to this end. Further, the regions have changed the financial incentives to providers by moving away from activity and

pay-for-performance-based payment models, towards fixed and/or capitated payment. Other innovative changes include substitution between staff categories and implementing digitalization. The rapid growth of private digital health care providers since 2016, offering instant video contacts throughout the country, is likely to spur a continued debate about how such providers can be integrated in the health system. Further debates concern how governance and management can support collaboration across regions and municipalities, and the integration of the National System for Knowledge-driven Management with existing principles of governance and management in each region. Developments in these areas need to consider complaints among the health professionals about an increased administrative workload and failing and non-integrated digital systems, not least from physicians.

1

Introduction

Chapter summary

- Sweden is located in northern Europe and has a population of about 10.4 million (2021). Most of the population lives in southern, coastal and urban areas, while the north is sparsely populated.

- Life expectancy in Sweden is among the highest in the European Union (EU). Despite a drop in 2020 during the COVID-19 pandemic, life expectancy has increased steadily as the result of improved public health and treatment methods.

- Challenges in Swedish health care relate to long waiting times for elective, specialized services and a lack of continuity of care, particularly in rural areas. Although having a comparatively high equality in health compared with many other EU countries, health gaps and differences in health status exist across different socioeconomic groups.

- Sweden has a large public sector, with total public expenditure accounting for about half of Sweden's gross domestic product (GDP) in 2020. The share of public expenditure on social protection and health care has been fairly stable since 2011 at just over one quarter of GDP.

- The Swedish health system is decentralized to 21 regional governmental authorities responsible for financing and organizing health care for their populations. The 290 municipalities are responsible for nursing care for elderly people and people with functional impairments.

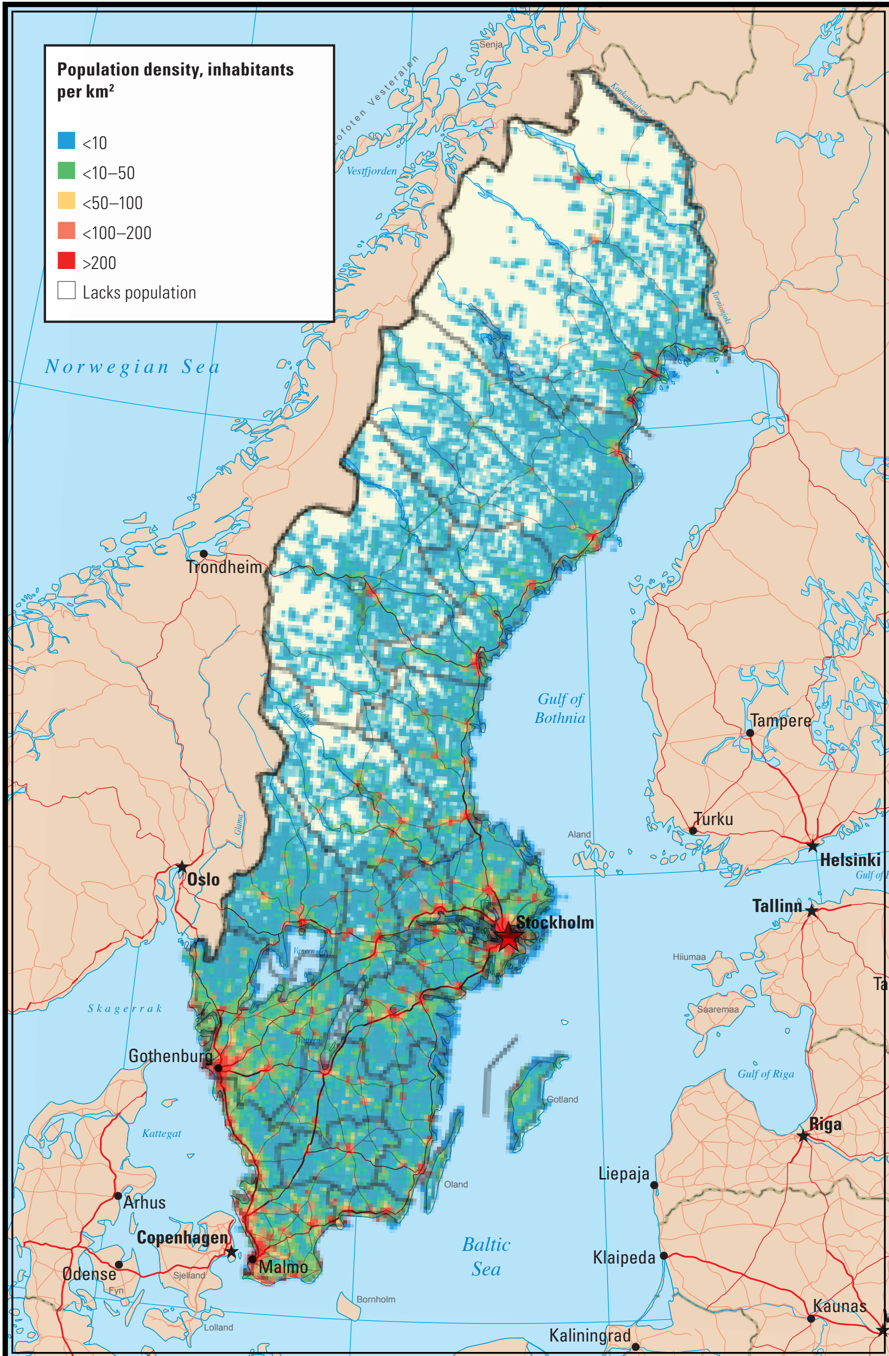
- GDP fell sharply following the COVID-19 pandemic in 2020 but the economy recovered quickly, and GDP per capita in purchasing power parity for 2021 is the fifth highest in the EU. However, the pandemic exposed several shortcomings in the health system, such as low preparedness of protective equipment and slow build-up of test capacity. During the pandemic, the national government provided significant extra financial resources to the regions and municipalities.

- The most common cause of death is diseases of the circulatory system. The most important risk factors affecting health status relate to unhealthy lifestyles, such as tobacco use and unhealthy eating habits. The prevalence of age-related chronic diseases, such as diabetes and mental and neuropsychiatric disorders, as well as the age-related increase in cancer incidence, are increasingly posing challenges for the health system.

1.1 Geography and sociodemography

Sweden is located in northern Europe, bordering Finland and Norway, and covers an area of 449 964 km^2, making it one of the largest countries by area in Europe (Fig. 1.1). The Swedish mainland coastline (2 400 km) is one of the longest in Europe. More than 57% of the country is covered by forest, and mountains dominate the sparsely populated north-western part. Due to the Gulf Stream, the climate is mild compared with other geographical areas this far north.

FIG. 1.1 Map of Sweden



Source: Statistics Sweden, 2022a.

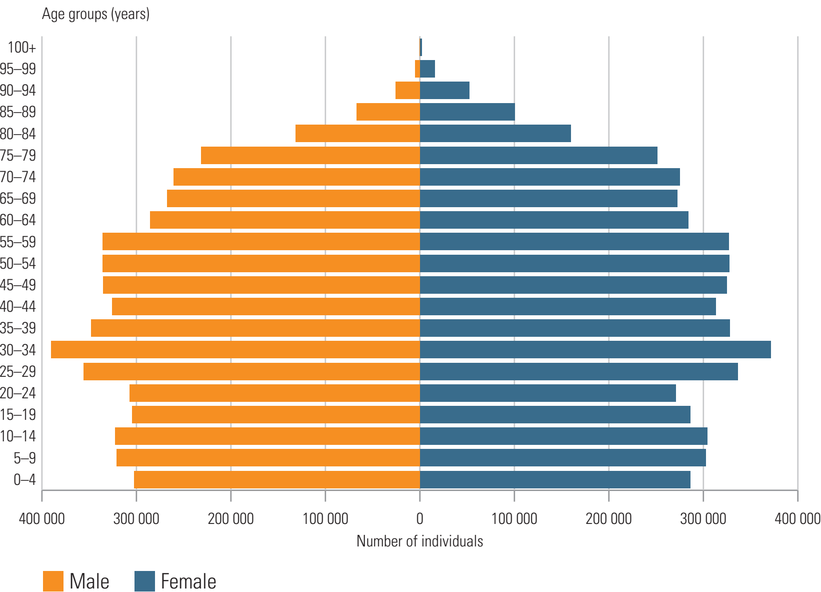
Note: The designations employed and the presentation of the material in the above map do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Since 1995, the Swedish population has increased by approximately 20% (from around 8.8 million in 1995 to above 10.4 million in 2021) as the result of high net migration, increased fertility rates and life expectancy. Immigration has been the main reason behind the population growth, especially between 2010 and 2020. In 2016, immigration was at a record high, amounting to 163 000 people, as a result of the refugee crisis in Europe in 2015, where Sweden was one of the countries in the EU that received the most refugees, especially from Syria (Eurostat, 2016; Statistics Sweden, 2022b). Since then, immigration has fallen significantly. In 2021, around 95 000 residence permits were granted. The largest group (around 10 500 individuals) were Swedes who re-immigrated after having lived abroad. The second largest group came from India, followed by Syria and Germany (Statistics Sweden, 2022b).

In 2022, about 20% of the Swedish population was born abroad. Inhabitants born outside Europe in general have lower life expectancy and worse health status than those born in Sweden or other parts of Europe. To become a Swedish citizen as an adult (over 18 years of age), one must have lived in Sweden continuously (generally for 5 years) with a residence permit or other right to reside in the country. A person who has been convicted of a crime in Sweden or has a debt to the Enforcement Agency (*Kronofogdemyndigheten*) cannot acquire Swedish citizenship.

The gender and age distributions of the population in 2021 are shown in Fig. 1.2. Up to the age of 60 years, there are slightly more men than women. This is mainly because more boys than girls are born. Among the older groups, it is the opposite, and this is because women have higher longevity. The group aged 30–34 stands out because many children were born in the early 1990s, and because a large proportion of those who have immigrated belong to this age group (Statistics Sweden, 2022c). The age-cohorts after 60 years are decreasing, in particular in higher ages, due to higher levels of mortality. The percentage of the population aged 65 years and older is increasing, but at a lower rate since 2015 compared with the previous 5-year period, in part explained by the increase in net immigration (Sveriges Riksbank, 2019).

FIG. 1.2 Swedish population by age and sex, 2021



Source: Statistics Sweden, 2022c.

The main language is Swedish, but Finnish, Meänkieli [a group of distinct Finnish dialects (or a Finnic language) spoken in the northernmost part of Sweden], Yiddish, Romani and Sami are classified as national minority languages. People who identify themselves as belonging to a national minority have certain rights, such as receiving elderly care in their language. Swedish sign language is not considered a minority language but rights to access are regulated in the Language Act (*Språklag* 2009:600). In addition, there are about 200 different languages spoken.

Sweden is a secular country, and it is prohibited to register an individual's religious affiliation. The largest religious organization is the Church of Sweden, a protestant community that was the state church up to the year 2000.

Sweden is divided into 290 municipalities and 21 regions (including the island of Gotland, which is both a municipality and a region). The population in the municipalities varies widely from around 2 400 in Bjurholm to almost 1 million in the largest municipality, Stockholm. Only three regions have a population above 500 000 inhabitants. The region of Stockholm is the largest with about 2.4 million inhabitants; there are 26 municipalities within the county of Stockholm and approximately 40% of the population are inhabitants

in the municipality of Stockholm. In contrast, the smallest region (excluding Gotland) is the Region of Jämtland Härjedalen with about 132 000 inhabitants (Statistics Sweden, 2022d).

In terms of population movement, a long-term trend towards increased urbanization is observed. The definition of an urban area is a place with contiguous settlements with at least 200 inhabitants. In 2021, 12% of the population lived in rural areas (Table 1.1). Particularly in the north, people have large distances to travel to access health care facilities, which among other things can affect access, continuity of care and medical outcomes, especially because shortages of skilled staff are more common in rural areas (see Section 4.2.2 Trends in the health workforce).

TABLE 1.1 Trends in population/demographic indicators, 1995–2021

	1995	2000	2005	2010	2015	2021
Total population	8 826 939	8 872 109	9 029 572	9 378 126	9 799 186	10 415 811
Population aged 0–14 (% of total)	18.8	18.4	17.4	16.5	17.3	17.7
Population aged 65 and above (% of total)	17.5	17.3	17.3	18.2	19.6	20.5
Population density (people per km²)	21.5	21.6	22.0	22.9	24.1	25.6
Population growth (average annual growth rate)	0.5	0.2	0.4	0.9	1.1	0.6
Fertility rate, total (births per woman)	1.7	1.5	1.8	2.0	1.9	1.7 (2020)
Distribution of population (% urban)	83.8	84.0	84.3	85.1	86.6	88.2

Source: World Bank, 2022.

1.2 Economic and social context

The Swedish economy is based on services, heavy industries and international trade. Timber, hydropower and iron ore constitute the resource base of the economy, which is heavily oriented toward foreign trade. In 2020, about 80% of GDP measured as value added was produced in the private sector where services account for the major part (Statistics Sweden, 2022e).

A distinctive feature of Swedish welfare policy is that it is largely universal, namely, public services and social transfers are designed as social rights that

cover the entire population in different life situations, not just vulnerable groups (Ministry of Finance, 2017). Consequently, Sweden has a comprehensive public sector, with total public expenditure accounting for about half of Sweden's GDP (measured in terms of consumption). The largest share (38%) comprises transfers to cover social protection (such as old age pensions but also expenses for care for elderly individuals, such as home services and special accommodation). Health care is the second largest part followed by education, general public services and economic affairs. The share of public expenditure in GDP on social protection and health care has been fairly stable since 2011, and varied between 27.9% and 25.9% (Eurostat, 2022a).

Public expenditures have not changed much over the last 10 years; however, there has been a significant reduction compared with 1995 (see Table 1.2). This is explained by reduced social transfers to households, not least covering sickness and unemployment benefits and pensions, and especially between 1995 and 2000. Sweden had a deep financial crisis at the beginning of the 1990s, and a sharp increase in government debt between 1990 and 1994, both of which affected public expenditure negatively. The crises led to fiscal and monetary policy reforms during the second half of the decade, and national debt as a proportion of GDP almost halved between 1995 and 2010. Together with monetary reforms and a strong emphasis on reforms of the labour market and social policies, this resulted in consistent economic growth during the 2000s. The global financial crises in 2007–2010 led to a fall in exports and the largest drop in GDP since the Second World War. Compared with other countries, however, Sweden performed well in response to the external shock, largely because of the reforms to social, fiscal and monetary policies that had been implemented during the previous crises. In 2020, national debt as a proportion of GDP was 39.9%, the fifth lowest in the EU.

Although economic growth was high in Sweden during the years following the global recession, GDP fell sharply after the outbreak of the COVID-19 pandemic in 2020. However, the decline in Sweden's GDP was moderate compared with several other European countries that introduced more extensive restrictions during the pandemic. In 2021, GDP per capita in Sweden, adjusted for differences in purchasing power was the fifth highest in the EU (OECD, 2021). Although the economy recovered quickly, the pandemic exposed several shortcomings in the health care system, such as low preparedness of protective equipment and slow build-up of test capacity (SOU, 2022:10). Public expenses increased as a result of the pandemic, and although most of these expenses were targeted at the labour market (such as

financial support for short-term lay-offs), the national government also took extensive measures to ensure financial resources for health care, elderly care and infection control with large financial contributions to regional authorities and municipalities.

Both the financial crisis in the 1990s and the global financial crisis in 2008, and also to a certain extent the COVID-19 pandemic, had large effects on unemployment. Unemployment is currently around 7–8%, but it is lower for people born in Sweden and with at least 12 years of education, whereas refugee immigrants and people with a shorter education are overrepresented among the long-term unemployed (Edholm & Mångs, 2022).

TABLE 1.2 Macroeconomic indicators, 1995–2021

	1995	2000	2005	2010	2015	2021
GDP per capita (current US$)	30 282	29 624	43 437	52 869	51 545	60 238
GDP per capita, purchasing power parity (current international US$)	23 094	29 618	34 244	42 223	49 103	59 323
GDP annual growth rate (%)	3.9	4.8	2.9	6.0	4.5	4.8
Public expenditure including social insurance for pension, sickness insurance etc. (government expenditure as % of GDP)	63.0	53.1	52.3	50.4	49.3	50.2
Public expenditure excluding social insurance (government expenditure as % of GDP)	45.9	38.2	37.3	36.5	36.1	38.1
Government deficit/surplus (% of GDP)	−7.0	3.1	1.8	−0.1	0.0	−0.2
General government gross debt (% of GDP)	68.7	50.3	48.7	38.1	43.7	36.7
Unemployment, total (% of labour force)	8.9	5.5	7.5	8.6	7.4	8.7
Poverty rate (people at risk of poverty or social exclusion, % total population)	–	–	–	–	18.2	17.2
Income inequality (Gini coefficient of disposable income EU-SILC)	21 (1997)	24 (2001)	23.4	25.5	26.7	26.8

Notes: EU-SILC: European Union Statistics on Income and Living Conditions; GDP: gross domestic product.

Sources: GDP and unemployment: World Bank, 2022; Government expenditures, poverty rate and Gini-coefficient: Eurostat, 2022a, b, c.

In 2020, Sweden had a low poverty rate (people at risk of poverty or social exclusion) compared with the EU average, but still higher than neighbouring countries such as Denmark, Norway and Finland (Eurostat, 2022b). The share of income among the wealthiest 10% of the population was 23% in 2019, and the corresponding figure for the poorest 10% of the population was 3%, a slight increase in inequality since 2000 (World Bank, 2021). Notably, income inequalities have increased significantly since the 1990s. The Gini coefficient (disposable income), increased from 21 in 1997 to 26.7 in 2021 (Eurostat, 2022c).

1.3 Political context

Sweden is a parliamentary democracy governed at the national, regional and local level with a proportional election system. General elections for the three levels of government are held on the same day every 4 years. All Swedish citizens aged 18 years or older are entitled to vote in the parliamentary and EU elections. To be entitled to vote in the municipal and regional elections, individuals are required to be at least 18 years of age and a resident of the municipality and region concerned for the past 3 years, but citizenship is not required. In the 2022 national election, election participation was 84%, compared with 87% in 2018, the first decrease in participation in 20 years (Statistics Sweden, 2022f). Sweden has been a member of the EU since 1995 and implements EU regulations and takes part in the decision-making process for joint regulation.

The Riksdag is a uni-cameral parliament and the supreme national political decision-making body in Sweden with 349 seats. The Riksdag appoints the Prime Minister, who is requested to form a government. The government implements the Riksdag's decisions and draws up proposals for new laws or law amendments, assisted by the Government Offices of Sweden, comprising a number of ministries and some 300 national government agencies and public administrative bodies. The task of the government agencies is to implement the decisions made by the Riksdag and the government. They are autonomous in the sense that they act on their own responsibility, in accordance with the guidelines laid down by the government. Compared with other EU member states, the decision-making process is decentralized,

known as local self-government, and the autonomy of the municipal and regional councils in terms of self-governance and power of proportional income taxation is enshrined in the Swedish constitution (*Regeringsformen* 1974:152). While governed by national assignments and government regulations, they are responsible for a range of tasks related to welfare and local and regional community development. Within their area of jurisdiction and responsibility, regions and municipalities are governed by elected politicians in municipal and regional councils.

The main responsibility for the provision of health care services lies with the 21 regions (previously county councils). The regions are responsible for the funding and provision of health care services to their populations at hospitals and primary care centres (PCC) (see Fig. 2.1). Health care services account for roughly 80% of the regions' activities. Other responsibilities include regional public transportation, development and culture. During the years 1999–2019, responsibilities for regional development have been transferred from county administrative boards (*Länsstyrelsen*) to regions, a process that also initiated the change in name from county councils to regions.

The 290 municipalities are responsible for matters relating to their inhabitants and their immediate environment, such as primary and secondary education, childcare, and nursing care and housing needs of elderly people and people with functional impairments. Around 20% of municipality services are classified as health care, provided in ordinary or special housing (see Fig. 2.1).

The political landscape in Sweden has undergone considerable changes in recent decades. The number of political parties in the Swedish parliament has increased from five to eight, and the traditional political right–left socioeconomic scale has been challenged by a sociocultural scale relating to lifestyle and identity. The Swedish Social Democratic Party has remained the biggest party and they have held government power, either in their own minority government or in a minority coalition with the Swedish Green Party, during most of the 2000s. Between 2006 and 2014, Sweden was governed by a centre-right alliance government consisting of the Moderate Party, the Liberals, the Christian Democrats and the Centre Party. The national-conservative Sweden Democrats has had significant electoral success in Sweden since 2006 based on an ethno-nationalist and anti-immigrant rhetoric (Wennerhag & Elgenius, 2018).

Since the 2022 election, Sweden is governed at the national level by a centre-right minority government consisting of the Moderate Party, the Christian Democrats and the Liberals. The government has support in the

parliament from the Sweden Democrats and the four parties are committed to a joint policy plan named *Tidöavtalet*. Previously, Sweden was governed by the Social Democrats in a minority coalition with the Green Party between 2014 and 2022. At the regional level, the 2022 election led to change of governing power in 13 of 21 regional councils, mostly in a left-of-centre oriented direction, and from 2022 the two largest regions of Stockholm and Västra Götaland are governed by parties that at the national level are in opposition to the national government.

1.4 Health status

Life expectancy in Sweden is among the highest in the world – 84.8 years for women and 81.2 years for men in 2021 (Table 1.3). As in most other EU countries, average life expectancy has increased steadily apart from a small decrease during the COVID-19 pandemic. Although women in Sweden live longer than men, the percentage of women that state that their health is good is slightly lower than among men, also when adjusted for differences in age. It is also more common for women to have chronic conditions (AHCSA, 2022a). According to a survey in 2021, 82% of the population aged 65 and above had a chronic disease (AHCSA, 2022b). People with chronic diseases account for 80–85% of total health care costs (AHCSA, 2014a). Hence, the growing number of elderly people with chronic diseases pose challenges to the health care system.

The leading causes of death for both men and women in 2021 were diseases of the circulatory system and cancer, corresponding to more than half of all deaths. Mortality from circulatory diseases has been reduced significantly during the last 40 years, which is one of the major contributors to the rise in life expectancy (see Table 1.3). Over a 20-year period, age-adjusted mortality (per 100 000 inhabitants) due to cancer has also decreased, by 27% among men and 17% among women. Mortality has decreased, but the incidence of cancer (per 100 000 inhabitants) is increasing, and has increased by about 40% since the 1970s when adjusting for age. Of all deaths due to cancer, breast cancer was the most common form among women until 2005. Since then, programmes and medical technologies to prevent mortality due to breast cancer have been successful, contributing to a decrease of 19% (2006–2020). Deaths due to lung cancer increased considerably among women between the late 1980s until 2005, and lung cancer is now the most common form of

cancer among women. Among men, lung cancer decreased during the same period and prostate cancer is now the most common cancer among men and in the population overall.

In addition to mortality from circulatory diseases and cancer, mental and behavioural disorders (such as dementia), diseases of the nervous system (such as Alzheimer and Parkinson diseases), and diseases of the respiratory system were the next most common causes of death for women in 2021. For men, the next most common cause of mortality in 2021 was COVID-19, followed by external causes of death and diseases of the respiratory system. Deaths related to diseases of the respiratory system have decreased by 45% among men and 32% among women over a 20-year period (2001–2021), but mortality from diseases of the nervous system has doubled for both men and women (NBHW, 2022a).

Compared with the EU average and using the European standard population, Sweden had lower mortality from circulatory diseases and cancer in 2017 (the latest available year for comparisons) at 307 and 230 deaths per 100 000 population compared with the EU averages of 368 and 252, respectively. Mortality from infectious and parasitic diseases and external causes are at similar or slightly higher levels in Sweden, and mortality from mental and behavioural disorders (normally due to age) are higher in Sweden (Table 1.3).

TABLE 1.3 Mortality and health indicators, 1995–2021

	1995	2000	2005	2010	2015	2021*
Life expectancy (years)						
Life expectancy at birth, total	79.1	79.9	80.8	81.5	82.2	82.4 (2020)
Life expectancy at birth, male	76.3	77.5	78.6	79.5	80.3	81.2
Life expectancy at birth, female	81.7	82.3	83.0	83.5	84.0	84.8
Life expectancy at 65 years, male	16.0	16.7	17.4	18.2	18.9	19.4
Life expectancy at 65 years, female	19.7	20.1	20.6	21.0	21.4	22.0

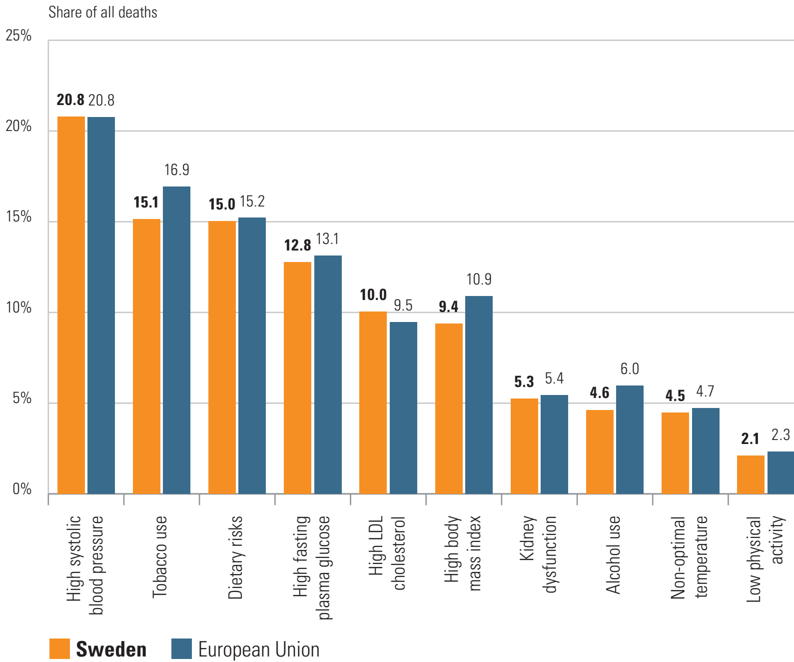
	1995	2000	2005	2010	2015	2021*
Mortality, deaths per 100 000 population (standardized rates according to the population in 2021)						
Mortality, standardized death rate						
Circulatory diseases	–	555	465	406	339	264
Cancer/malignant neoplasms	–	265	264	245	239	213
Certain infectious and parasitic diseases**	–	13	16	22	24	23
External causes of death	–	51	55	51	53	48
All causes	–	1 190	1 104	1 024	962	884
Infant mortality rate (per 1 000 live births)	4.0	3.4	3.0	2.5	2.3	2.1 (2020)
Maternal mortality rate (per 100 000 live births)	–	5.0	5.0	4.0	4.0	4.0 (2017)

Notes: * Or latest available year (indicated in parentheses). ** These are diseases generally recognized as communicable or transmissible with the International Classification of Diseases, 10th revision codes A00–B99.

Sources: Mortality: NBHW, 2022b; Life expectancy: Statistics Sweden, 2022g.

Diseases of the circulatory system, some forms of cancer (such as breast, prostate, colon and rectal cancer) and diabetes are classified as public diseases in Sweden, as they have high prevalence in the population and are judged to have a major impact on the population's health. Such conditions can to a large extent be prevented or reduced in severity with healthy lifestyle habits and early detection (PHA, 2022a). The reduction in mortality from circulatory diseases has been achieved through both preventive measures, for example a reduction in the number of daily smokers and people with high cholesterol, as well as improved treatment methods. Although mortality is generally decreasing, the prevalence of chronic diseases such as diabetes, cancer, and mental and behavioural disorders is increasing (AHCSA, 2019). Obesity (body mass index above 30 kg/m^2) is one of the main risk factors affecting health status in Sweden, increasing the risk of chronic diseases such as high blood pressure and diabetes, and increasing numbers of cardiovascular deaths (see Fig. 1.3). Although the prevalence of risky alcohol consumption and smoking is decreasing, obesity has increased by 30% since 2006 and in 2021, 16% of the population was obese (see Box 5.1).

FIG. 1.3 Major risk factors affecting health status, 2019



Source: Global Burden of Disease Collaborative Network, 2022.

Life expectancy in Sweden is improving, but there are still significant gaps between different socioeconomic groups. Both life expectancy and self-rated health status are higher among people with post-secondary education compared with those with a shorter education (AHCSA, 2022a). There are also large regional differences in both mortality and morbidity, often connected to socioeconomic differences. Region Norrbotten, the region with the highest mortality from ischaemic heart disease (about one third of deaths in circulatory diseases) had a 94% higher mortality rate in 2021 than the region with the lowest mortality rate (Region Stockholm) (NBHW, 2022a). Still, Sweden has a lower difference in mortality between different socioeconomic groups compared with many other European countries (AHCSA, 2022a). A contributing factor is the low rate of smoking, which is an important risk factor affecting differences in health status when comparing socioeconomic groups (Mackenbach, 2017).

2

Organization and governance

Chapter summary

- The goal of the Swedish health care system is to provide good health and care on equal terms for the entire population. Care must be given with respect for the equal value of all people and for the dignity of the individual person. Those who have the greatest need for health care must be given priority for care.

- The Swedish health care system is decentralized and organized into three levels: national, regional and municipal. The main responsibility for health care services is delegated to the 21 regions and the 290 municipalities. Due to its decentralization, geographical differences in how health care services are organized and delivered exist.

- Health care is part of social protection, with predominantly tax-based financing and public provision, and covers almost everyone who lives or work in Sweden.

- There is an institutional set-up for monitoring the health care system and various national agencies produce supporting documents for policy implementation and reforms, but evaluations indicate that reforms, recommendations and other policies are frequently not fully implemented by regions and municipalities in practice.

- The scope of the government to enforce laws and national policies at the regional and municipal levels is limited due to regional and municipal self-governance.

2.1 Historical background

Sweden's public health care system developed in the 19th century and expanded during industrialization. Regions (formerly called county councils) became legally responsible for providing inpatient hospital care to their residents in 1928 due to the implementation of the Hospitals Act (*Sjukhuslagen* 1928:303). In the 1950s, subsidies for outpatient (or ambulatory) services and medicines increased through the introduction of national social protection systems. The expansion of the welfare state and the health sector accelerated during the 1960s, but the primary focus concerned hospitals. Access to outpatient services improved during the 1970s as part of a reform introducing uniform and low patient fees (the so called "seven-crown reform"). In parallel, regions became responsible for providing outpatient hospital services to patients, and the responsibility for primary care and mental health care services, previously a national responsibility, was transferred to the regions. At the same time, the national parliament decided to socialize the private pharmacies and the National Corporation of Swedish Pharmacies (*Apoteksbolaget*) was established in 1971. Both of these reforms reflected the dominant belief at the time that services could be improved under public ownership.

In 1982, the Health and Medical Service Act (*Hälso- och sjukvårdslagen* 1982:763) was passed, which forms the basis of the contemporary health care system. By then, regions were responsible for providing all health care services, including the university hospitals and long-term inpatient health care and care for elderly. The 1982 Act focused on the responsibility of regions and stated that the objective of health care is to ensure good and equal care for the whole population. Health care should be given with respect for all persons' equal value and the individual person's dignity.

The Health and Medical Service Act was revised in 2017 (*Hälso- och sjukvårdslagen* 2017:30). The revision was motivated by a need to restructure and to clarify the responsibilities of the different stakeholders. In addition to the revision in 2017, some later amendments have been made aiming to support the transition towards a more person-centred health care service based on a more specific definition of primary health care.

In the late 1980s, the lack of choice for inhabitants was debated and, not least, the regions were criticized for a lack of cost control and poor efficiency (Roos, 1985). This criticism paved the way for a number of New Public Management reforms in several regions in the early 1990s, including a purchaser–provider split, new contracts for providers and increased choice for inhabitants. However, many regions returned to a traditional mode of planning and control following the financial crisis in 1990–1994.

During the early 1990s, the trend was also to transfer responsibility from regions to municipalities. In 1992, the ÄDEL reform was implemented whereby responsibility for long-term inpatient health care and care for elderly individuals was transferred from the regions to the municipalities. A few years later, the municipalities took over the responsibility of care for people with functional impairments (the physical impairment reform, *Handikappreformen*) by the Act Concerning Support and Service for People with Certain Functional Impairments (*Lag om stöd och service till visa funktionshindrade* 1993:387) (see Section 2.7.2 Regulation and governance of provision), and for people with mental impairment or long-term mental illness (the psychiatric reform, *Psykiatrireformen*). The objective of these reforms was to improve services through integration between health care and social services of the municipalities. About one fifth of total regional health care expenditure was transferred to the municipalities that were financially compensated for these new responsibilities.

During the period 2006 to 2014, the centre-right government conducted a number of national reforms with the aim of increasing freedom of choice in health care. Since 1 January 2010, following a change in the Health and Medical Services Act, choice of primary care provider for the population and freedom of establishment for private care providers accredited by the regions has been mandatory. This also means that the previous focus on the responsibility of PCCs for a geographical population has been abandoned. Another important national decision was to re-regulate the pharmacy market by allowing competition and private ownership of pharmacies from 2009. This re-regulation of ownership was accompanied by a sale of about half of the government-owned pharmacies operated by the National Corporation of Swedish Pharmacies. Since the deregulation of the pharmacy market, there is free entry to the market, conditional on a permit from the Medical Products Agency (MPA). The number of pharmacies has grown significantly since 2009, with ownership concentrated among large national pharmacy

chains. More recently, traditional pharmacies have faced significant and new competition from on-line pharmacies.

In the last two decades, society has become increasingly digitalized, which has developed health care services through the introduction of various e-services and digital consultations. Sweden aspires to be a leading country in relation to eHealth (see Section 4.1.3 Information technology and eHealth). Another shift relates to patients' involvement in the health care services provided, where reforms for a more person-centred care system with primary care as its foundation are being implemented. Recent reform trends also concern increased concentration of highly specialized care together with implementation of standardized clinical pathways in different diagnoses, where cancer care was the starting point.

A more thorough review of the Swedish health system's historical background can be found in the previous HiT (Anell, Glenngård & Merkur, 2012).

2.2 Organization

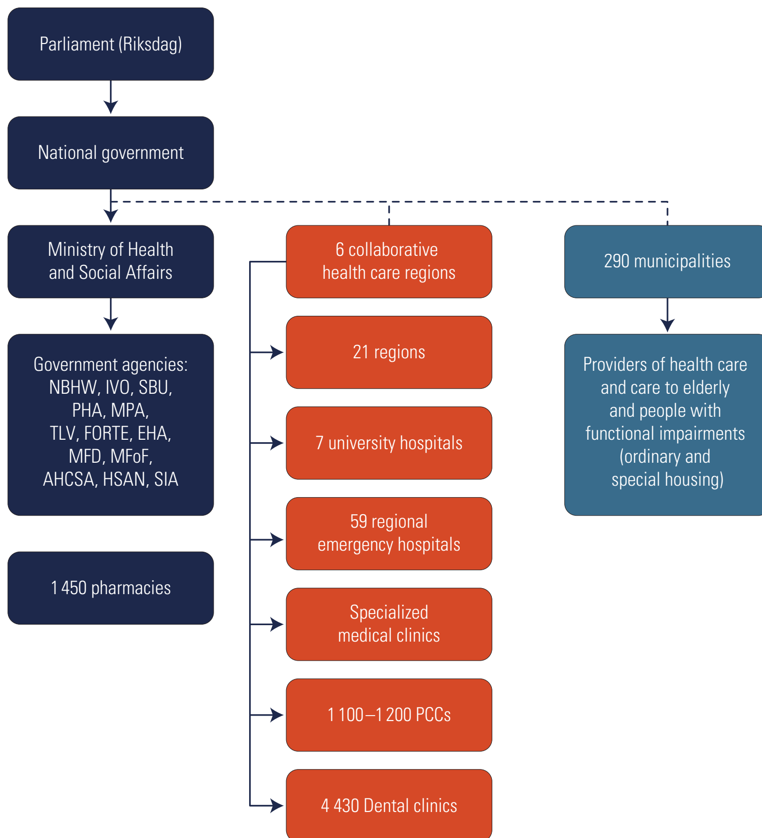
Overall, Swedish health care is predominantly financed by taxation (see Chapter 3 Financing) and (in terms of expenditure) 83% of the service production is conducted by public providers in 2020 (SALAR, 2023a). A contributing reason is that inpatient and outpatient specialized care absorbs around two thirds of the funding, where almost all hospitals are public owned and managed. Another reason is that private care provision is limited to urban areas, mostly in the major cities.

Although the health care system is mostly decentralized and managed independently by Sweden's 21 regions and 290 municipalities, the Ministry of Health and Social Affairs is responsible for overall health care policies and national governance (see Fig. 2.1).

Government agencies and national actors

At the national level, the Swedish people are represented by the Riksdag (Swedish parliament) which has legislative powers. Proposals for new laws are presented by the government, which also implements decisions taken by the Riksdag. The government is assisted in its work by the government offices,

FIG. 2.1 Overview of the health system: Sweden



Note: AHCSA: the Agency for Health and Care Services Analysis/*Myndigheten för vård- och omsorgsanalys;* EHA: Swedish eHealth Agency (*e-hälsomyndigheten*); FORTE: the Swedish Research Council for Health, Working Life and Welfare (*Forskningsrådet för hälsa, arbetsliv och välfärd*); HSAN: the Medical Responsibility Board (*Hälso- och Sjukvårdens Ansvarsnämnd*); IVO: the Health and Care Inspectorate/*Inspektionen för vård och omsorg;* MFD: the Swedish Agency for Participation (*Myndigheten för delaktighet*); MFoF: the Family Law and Parental Support Authority (*Myndigheten för familjerätt och föräldraskapsstöd*); MPA: the Medical Products Agency/*Läkemedelsverket;* NBHW: the National Board of Health and Welfare/*Socialstyrelsen;* PCC: primary care centre; PHA: The Public Health Agency of Sweden/*Folkhälsomyndigheten;* SBU: the Swedish Agency for Health Technology Assessment and Assessment of Social Services/*Statens Beredning för Medicinsk och Social Utvärdering;* SIA: the Swedish Social Insurance Agency/*Försäkringskassan;* TLV: the Dental and Pharmaceutical Benefits Agency/*Tandvårds- och Läkemedelsförmånsverket.*

Source: Authors' own compilation.

comprising a number of ministries, and some 400 central government agencies and public administrations. The Ministry of Health and Social Affairs is responsible for issues concerning social welfare, such as public health, health care and care of older people. The ministry's area of responsibility also includes social insurance, which provides financial security to people when they are

sick or elderly, or when children are young. Issues concerning individual and family care, support for people with disabilities and care of elderly individuals are also included. The Ministry also works on rights for people with disabilities and on issues related to the premium pension system. It is also responsible for issues concerning sport, youth policy, civil society, faith communities, and burial and cremation services.

There are several government agencies directly involved in the area of health, medical care and public health.

1. The National Board of Health and Welfare (NBHW – *Socialstyrelsen*) is the government's central advisory and regulatory agency in the field of health care and social services. It is engaged in a wide range of activities. NBHW develops norms, standards and guidelines in a number of areas. Furthermore, it monitors developments, performs data collection and undertakes analysis. NBHW also maintains health data registers and official statistics and directs several advisory and decision-making bodies, such as the Legal Advisory Board (*Rättsliga rådet*), the Ethics Council (*Etiska rådet*) and the Board for National Specialized Medical Care (*Nämnden för nationellt högpsecialiserad vård*).

2. The Health and Social Care Inspectorate (IVO – *Inspektionen för vård och omsorg*) is responsible for supervision of health care, health care personnel, social services and activities for those with functional impairments (see Section 2.8.3 Patient rights). The authority also assesses permissions for private care organizations.

3. The Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU – *Statens Beredning för Medicinsk och Social Utvärdering*), conducts independent assessments of available evidence through systematic literature reviews regarding methods and actions taken within health care and dental care as well as social services (see Section 2.7.3 Regulation of services and goods).

4. The Public Health Agency of Sweden (PHA – *Folkhälsomyndigheten*) promotes good and equal health and prevents diseases by providing the government, government agencies, municipalities and regions with knowledge based on scientific evidence (see Section 2.5 Intersectorality).

5. The Medical Products Agency (MPA – *Läkemedelsverket*), is responsible for the regulation and surveillance of the development, manufacture and sale of pharmaceuticals and other medicinal products. All drugs sold in Sweden must be approved by and registered with MPA (see Section 2.7.4 Regulation and governance of pharmaceuticals).

6. The Dental and Pharmaceutical Benefits Agency's (TLV – *Tandvårds- och Läkemedelsförmånsverket*), primary task is deciding if a medicine or medicinal product should be subsidized and included in the pharmaceutical benefits scheme (see Section 2.7.4, Regulation and governance of pharmaceuticals). TLV also has the mandate to decide which dental services should be subsidized and the mission to monitoring activities in the pharmacy market according to existing regulations.

7. The Swedish Research Council for Health, Working Life and Welfare (FORTE – *Forskningsrådet för hälsa, arbetsliv och välfärd*) promotes and supports research within the area of health, working life and welfare. The agency finances research, analyses areas in need of further research and communicates research results.

8. The Swedish eHealth Agency (EHA – *e-hälsomyndigheten*) coordinates the government's initiatives within e-health and offers products and services to individuals and professions. The agency aims to improve the exchange of information within health and care.

9. The Swedish Agency for Participation (MFD – *Myndigheten för delaktighet*) is an expert agency that promotes the implementation of disability policy. The agency develops and spreads information about obstacles to participation and supports public-sector bodies.

10. The Family Law and Parental Support Authority (MFoF – *Myndigheten för familjerätt och föräldraskapsstöd*) is responsible for international adoptions and is the expert authority for parental support, family advice and questions relating to the family law matters handled by municipal social welfare committees.

11. The Swedish Agency for Health and Care Services Analysis (AHCSA – *Myndigheten för vård- och omsorgsanalys*) is an independent agency that evaluates and analyses the workings of the care system, including dental care, health care and social services from the perspective of patients and citizens.

12. The Medical responsibility board (HSAN – *Hälso- och Sjukvårdens Ansvarsnämnd*) decides on disciplinary measures in the event of complaints or possible malpractice. The HSAN decides on questions notified by IVO and professionals.

13. The Swedish Social Insurance Agency (SIA – *Försäkringskassan*), is the authority that administers the various types of insurance and benefits that make up social insurance in Sweden. The main function in relation to health is compensation for loss of income due to illness. The Agency is also engaged in work designed to prevent and reduce ill health through positive, proactive action towards returning the person to the workforce.

Agencies 1–10 listed above are organized into the Committee for knowledge-based guidance (*Rådet för styrning med kunskap*), a collaboration set up in 2015, intended to drive the development in the area of health and social care. The committee is directed and chaired by the director general of NBHW, and deals with strategically important issues that contribute to evidence-based knowledge reaching principals and professions in health care and social services. It also works to ensure that the views and experiences of patients and users are considered and provides a forum for questions about knowledge development, research and innovation.

There are also additional advisory bodies and expert groups operating at the national level.

- The Swedish Medical Ethics Council (Smer – *Statens medicinsk-etiska råd*) is an advisory body appointed by the government whose task is to shed light on medical ethics issues from an overall societal perspective.
- The Council on New Therapies (the NT-council – *NT-rådet*) is an expert group composed of representatives from Sweden's regions with the mandate to formulate recommendations to the

regions concerning the introduction and use of new and expensive pharmaceuticals.

- The National System for Knowledge-driven Management is a joint regional collaboration with medical experts in various fields that aims to improve knowledge-based health care. It is based on 26 national programme areas, with responsibility for various areas such as mental health, cancer and emergency care. Within these, experts representing each of the collaborative health care regions are involved with the task of leading, coordinating and following up knowledge management in each area.

Interest organizations

The regions and municipalities are collectively represented by the Swedish Association of Municipalities and Regions (SALAR – *Sveriges Kommuner och Regioner*). The organization strives to promote and strengthen local self-government and provide municipalities and regions with a national platform for collaborations and expert assistance. In addition, it serves as the employers' central association for negotiating terms of employment and wages for personnel employed by the regions and municipalities.

The Association of Private Care Providers, Almega (*Vårdföretagarna Almega*) is a private employers' association for negotiating wages and terms of employment for personnel employed by private health and social care providers. In 2022, they represented about 2 000 companies with about 100 000 employees (Association of Private Care Providers Almega, 2022).

A majority of Swedish health care personnel are members of professional unions. The Swedish Association of Health Professionals (*Vårdförbundet*) is the trade union and professional organization representing about 114 000 registered nurses, midwives, biomedical scientists and radiographers (Swedish Association of Health Professionals, 2021). The Swedish Medical Association (*Sveriges läkarförbund*) is the union and professional organization representing physicians. Some 56 000 of Sweden's physicians were members of the organization in 2022 (Swedish Medical Association, 2022). The Swedish Medical Society (*Svenska Läkarsällskapet*) is the medical profession's scientific professional organization that works for science, education, ethics and quality in health care.

The Research-based Pharmaceutical Industry in Sweden (*De forskande läkemedelsföretagen*) is the trade association for the pharmaceutical industry in Sweden. It has about 90 members who represent the majority of the total sales of pharmaceuticals in Sweden (Research-based Pharmaceutical Industry in Sweden, 2022).

The Swedish Pharmacy Association (*Sveriges Apoteksförening*) is a non-profit association that represents virtually all pharmacies in Sweden and works to create good conditions for the pharmacy companies.

The patient and functional impairment movement consists of a range of actors – organizations as well as more loosely composed networks – that are driven by a non-profit commitment to improve the living conditions of people with functional impairment or illness in various ways. The most prominent actors in this context are the patient and disability organizations that receive government grants. The patient and disability organizations together have close to 500 000 members. The Rheumatism Association (*Reumatikerförbundet*), which is the largest, has around 50 000 members, but a majority of the organizations that receive government grants as disability organizations have fewer than 5 000 members (AHCSA, 2015a).

Regions and municipalities

The Local Government Act (*Kommunallagen* 2017:725), which came into force in 1992, defines the roles of municipalities and regions. Each region and municipality has an elected assembly – the regional council and the municipal council – which make decisions on matters that are under the responsibility of regions or municipalities, and they are responsible to their electorate. Both regions and municipalities operate through the law of municipal self-governance, which means that they are autonomous in the sense that they act on their own responsibility, in accordance with the laws and regulations formulated by the national government.

The 21 regions in Sweden collaborate in six larger geographical areas (collaborative health care regions) in which they work together in groups of two to seven regions to ensure full coverage of services for their citizens. Each collaborative health care region has at least one university hospital that serves all the regions in the area (seven university hospitals in total). In 2023,

there are 59 additional regional emergency hospitals and a large number of specialized clinics operating outside emergency hospitals, around 1 100–1 200 PCCs and approximately 4 430 dental clinics.

Sweden's 290 municipalities are responsible for approximately 25% of health care expenditure. Municipal health care is mainly carried out in special housing and home care for elderly people and people with functional impairments. Patients who have been fully medically treated and have been discharged from general hospital care or geriatric hospitals often also fall within the remit of the municipalities. Additional responsibilities of municipalities include issues relating to the immediate environment of the citizens, for example schools, social welfare services, roads, water, sewerage and energy.

2.3 Decentralization and centralization

Local self-government has a very long tradition in Sweden and is intended to create opportunities for developments in service provision throughout the country depending on local conditions and needs. The health care system consists of different levels of governance where responsibility is divided between municipal, regional, national and, in part, EU levels. Decentralization of responsibilities within the Swedish health care system not only refers to relations between national and local governments, but also to financing and decentralization within each region. Local self-government is partly intended to create different solutions to service delivery rather than similar services in all regions, to support adaptation to variation in local conditions. It has however also led to less favourable regional differences, for example with respect to patients' experiences of health outcomes after receiving care and access to services. Inequality between regions can further be explained by differences in the organization of the care system, differences in availability of equipment and health care staff, and local treatment traditions (AHCSA, 2022a).

BOX 2.1 Political accountability

There are several actors (as described in Section 2.2 Organization) involved in the governance of health care. Whereas the regions have the main responsibility for the provision of health care, the national level enacts laws and is also responsible for equity across geographical areas to a certain extent. The large number of actors involved may also cause confusion on which actor is responsible for what. There are several indications that many citizens hold the national government accountable for the outcomes of the health care system (Läkartidningen, 2022). For instance, a recent survey indicated that a minority of the inhabitants knew which level was responsible for health care and hence the interest in and reporting on the regional politics is low. Compared with the confidence in health care staff, the confidence in the health care system in general is at a lower level (ACHSA, 2018a).

The scope for the national government to enforce laws and national policies at the regional and municipal levels is limited because of regional and municipal self-governance. There are many examples of laws and regulations with low compliance, for instance the regulation on maximum waiting times and national clinical guidelines. Supervision on the national level is performed by IVO, but their responsibility is limited to supervising providers of health and social care, not the regions and municipalities. Hence, there are limited means for the government or parliament to hold regions and municipalities to account for their decisions and activities.

Municipalities and regions have the power to levy and collect proportional income taxes from their inhabitants, but they also receive governmental grants. Targeted financing has become an increasingly common tool for the government to influence regions and municipalities in a desired direction. For instance, there have been efforts to reverse low compliance with the law on maximum waiting times with performance-based grants for shortening waiting times. Further, grants targeted to solve challenges related to digital infrastructure, to increase the number and/or competence of health care staff, or to improve health care for certain patient groups can be perceived as a way for the government to take the initiative on health care issues. Regions and municipalities are in these cases obliged to report on how the grants have been used, but differences between regions are making such national investments and policies increasingly difficult to implement and the effects are often difficult to determine (Anell, 2020).

Since the late 1990s, there has been a tendency towards regional concentration or centralization through mergers of hospitals and regions and increased collaboration between different levels of care and between hospitals. Previous national policies of decentralization have also been replaced by a reverse trend of centralization and regionalization in the delivery of care. Two examples of centralization included the development of regional cancer centres in 2010 and establishment of national highly specialized care (*Nationell högspecialiserad vård*) in 2018 (see Section 5.4 Specialized care). The argument for centralizing the most advanced health care has been that the volumes of care were too low to uphold skills for seldom performed procedures, resulting in lower health care quality (Government Offices of Sweden, 2017). In parallel to centralization, there has been transition in the regions towards developing the scope and scale of health care services in close proximity to people, based on strengthening primary health care. There are also ambitions to improve the inhabitant's capacity to deal with their own health problems with support from remote digital health care services and tools.

2.4 **Planning**

The national objective for the health care system is that "people must be offered effective, good-quality health and medical care based on needs". This care must be "equitable, gender-equal and accessible" (Government Offices of Sweden, 2022). The regions are expected to plan the development and organization of health care according to the needs of their residents. Hence, the regions make most of the resource-allocation decisions regarding health services within their geographical area.

The priorities should follow the Health and Medical Services Act and a specific ethical platform (see Section 2.7.3 Regulation of services and goods), where it is stated that persons in greatest need shall be given priority. However, these priorities are complex in practice, partly because of difficulties when defining and assessing differences in need, both within and between diagnosis groups. Needs should be assessed based on the severity and duration of the health problem, as well as the potential health improvement that a care intervention can bring (National Centre for Priorities in Health, 2022). However, evaluations show that the overall planning and governance of the health care system according to the principle of need, especially concerning

priorities between different diagnosis groups, is rather weak at both the national and regional levels (AHCSA, 2020a) (see Section 2.7.3 Regulation of services and goods).

The national government and the regions collaborate extensively through agreements between SALAR and the government. The agreements concern both long- and short-term development projects to reform and improve different aspects of the health care system. The NBHW and other governmental agencies as well as the National System for Knowledge-driven Management and SALAR produce information and statistics regarding current and future demands in the population, to support decisions in regions (see Section 2.6 Health information systems).

BOX 2.2 Is there sufficient capacity for policy development and implementation?

The overall regulation of the health care system is a national responsibility. The traditional way of policy development is through government commissions, which produce regulatory proposals on governing reforms of the health care system. In addition, the majority of government agencies produce evidence-based guidelines and support implementation of regulatory reforms. There are also government agencies that analyse and make policy recommendations on health care policy.

The regions and municipalities are obliged to follow national law and binding regulations. However, they have wide autonomy for policy development within the boundaries of national regulation. That may include development of local health systems, clinical pathways, contracting out of services to private providers, payment systems, care programmes and responsibility for priority setting.

The shared responsibility between the national government and local levels when it comes to national reforms can be described as a strength but also presents challenges in terms of both adherence and coordination with ongoing changes at the local level. A divided responsibility between several semi-autonomous government agencies further adds to problems of coordination and lack of alignment from a local government perspective. Statistics and data based on common definitions are also often lacking in key areas. This limits evaluation, oversight and the policy debate.

The capacity to implement policies may also be questioned. Even though many evaluations are being produced, there is a lack of a holistic perspective of the health care sector which makes it difficult to effectively implement policies (SOU, 2020:36). There is also a lack of accountability and sanctions within regions and municipalities in cases where national policies are not implemented or followed.

2.5 Intersectorality

The Swedish constitution specifically states that the public sector must create good conditions for public health and many national, regional and local authorities are (directly or indirectly) important in public health work. At the national level, the government can influence public health policy through legislation and regulations, supervision and financial incentives in the form of targeted government grants. The responsibility for performing cross-sectoral follow up and evaluation of national public health policies lies with PHA. The current national public health policy is based on the overarching public health objective, which is to create the conditions for good and equitable health among the entire population, and to end avoidable health inequalities within a generation. In order to reach this objective, eight public health objective domains have been formulated, covering the most important determinants of Swedish public health and by which all public authorities at all levels should be guided. The public health objectives are formulated in relation to the United Nations global objectives in the 2030 Agenda for sustainable development, and several agencies are responsible for areas related to the public health objectives. The public health policy framework divides the conditions for health into eight target areas. Seven are based on areas important for equal health involving cross-sectoral work and one highlights equitable and preventive health and medical services (see also Section 5.1 Public health).

2.6 Health information systems

The primary sources of individualized health care data are patient records and administrative data at the provider level in regions and municipalities. From these sources, it is mandatory by law for the providers to report information to a number of national health data registries covering health care and social services administered by NBHW (see Box 2.3). Separate national health data registries on vaccinations are also administered by PHA. Besides this, the agency Statistics Sweden collects and reports financial statistics in the systems of health accounts.

Outside the government sector, interest organizations such as SALAR and professional specialist organizations also regularly collect, report and analyse data related to different areas of the health care system. Important indicator-based platforms include *Vården i siffror* (vardenisiffror.se) and *Kolada*

(kolada.se). There are also more than 100 national quality registries, formally kept by the regions but run and governed by professional collaborations (see Box 2.3). The quality registries contain individualized data on diagnoses and treatment outcomes within hospital care, primary care and municipal health care. The registries have previously been referred to as a "goldmine" for research and development work (Rosén, 2010). However, most of the registries concern specialized care and there are data gaps concerning coverage, as reporting is optional, and in wider usage of the registries (AHCSA, 2017a).

In addition to population-based registries, there are also several national surveys focusing on patient reported experiences in different areas and aspects of the health care system. Examples include the National Health Care Barometer Survey (*Hälso- och sjukvårdsbarometern*) about the population's views and perceptions of health care and the National Patient Survey (*Nationell patientenkät*) for patients in PCCs and hospitals by SALAR and the National Public Health Survey (*Nationella folkhälsoenkäten*). There are several other surveys connected to public health by PHA and surveys to municipalities for municipal health care and social services as well as to individuals receiving social care services by NBHW (see Box 2.3).

Data on waiting times and the regions' fulfilment of the waiting time guarantee (*vårdgarantin*) are collected in a national database by SALAR. The waiting time database is a statutory database to which the regions are obliged to report. SALAR then selects and calculates data that are presented as waiting time statistics on the Internet (vantetider.se). Each year, around 20 million contacts are reported for primary care and the same number in specialized care. However, evaluations have shown that there are deficiencies related to the database, such as gaps in coverage and sub-optimal quality assurance (SOU, 2022:22).

The regions have overall responsibility for the internal control of their health care systems, but IVO is the national agency that supervises health care providers in terms of accountability towards patient safety regulations. There are also a number of different actors involved in monitoring other aspects of the health system in terms of performance and accountability towards responsibilities (see Section 2.7.3 Regulation of services and goods). Apart from the legal supervision, there are several systems for monitoring health system performance using indicators mostly operationalized using the framework "Good health care and social services", that was developed by NBHW (Box 2.3).

BOX 2.3 Sources for monitoring health system performance

National health data registries are mandatory population-based registries managed by NBHW. They contain individualized data on health and social conditions and are built on individual social security numbers for the purpose of national statistics, follow up, evaluation and quality assurance of health care and research and epidemiological investigations. Examples are the National Patient registry (*Patientregistret*), the Registry of Municipal Health and Medical Care (*Registret över insatser inom kommunal hälso- och sjukvård*), the Swedish Prescribed Drug Registry (*Läkemedelsregistret*) and the Dental Health Registry (*Tandhälsoregistret*). NBHW also has registries on social services and their operations as well as registries on causes of death and health care staff. In addition, NBHW produces status reports based on the data registries and the national quality registries containing developments within various parts of health care, dental care and social services as well as the overall development within the areas with international comparisons.

National quality registries are standalone registries integrated into clinical pathways, containing individualized data on treatment and outcomes. They are run by the regions and health care professionals with joint financial support from the national government and the regions and provide a unique possibility to monitor both process quality and results. The purpose is quality development and research. Examples are the Swedish Stroke Registry (*RiksStroke*), Swedish National Diabetes Registry, the Swedish National Airway Registry (*Luftvägsregistret*) and National Quality Registry for Enhancement and Development of Evidence-Based Care in Heart Disease (SWEDEHEART) (see also Section 7.4 Health care quality).

Primary care quality (Primärvårdskvalitet) aims to support quality improvement through analysis, reflection and learning based on follow up and comparison of data. Primary care quality consists of 150+ quality indicators for acute and chronic conditions, mental illness, rehabilitation and core areas such as continuity, multimorbidity and lifestyle habits. The indicators are developed by a group of primary care professionals and are based on evidence and national guidelines. Providers and regions have various solutions for automatic collection and visualization of the suggested indicators from medical records. In late 2022, 89% of PCCs could follow their results in primary care quality, with data being automatically extracted from medical journals. For most regions it is also possible to relate their performance to other regions because data are presented online at Health Care in Numbers (*Vården i siffor*), provided by SALAR.

Open comparisons (Öppna jämförelser) is an umbrella term for performance comparisons of different health care services published annually by NBWH. They focus on comparisons between regions and hospitals as well as municipal health care services and social services, using data from the national quality

registries, health data registries and patient surveys and waiting time database. The 2015 publication of regional health care included 350 performance measures and indicators organized into various categories, such as prevention, patient satisfaction, waiting times, trust, access, surgical treatment and drug treatment.

National follow up of health care (Nationell uppföljning) is an indicator-based monitoring of health care at the national level produced by AHCSA. The purpose is to provide an overall picture of health care results, to follow developments and to identify challenges. The follow up also includes an international outlook, where AHCSA compares the outcomes in relevant parts of the Swedish health care system with the outcomes in other comparable countries.

2.7 Regulation

Swedish health care is regulated by national legislation as well as by EU legislation, which takes precedence. The government or parliament proposes bills to the parliament, which have the legislative power. The government´s decisions are made collectively, but the Ministry for Health and Social Affairs is responsible for preparing and implementing health care policy. In addition to national laws, national government agencies also issue regulations and general advice (recommendations) based on governing laws. Regions and municipalities exercise governance by requirements on providers, budget management and monitoring.

2.7.1 *Regulation and governance of third-party payers*

The number of people with voluntary health insurance (VHI) has increased in Sweden during the last decade and about 10% of the population aged 16–64 years has access to private insurance, often financed by their employer. VHI covers less than 1% of the total health expenditure in Sweden and is provided by several commercial insurers, which decide if a person is eligible for the insurance (Rice, 2021; SOU, 2021:80). Emergency care, intensive care, highly specialized care, care for chronic diseases or long-term diagnoses are generally not included and VHI is regulated to cover care by private providers. There has been a debate on whether there is a risk that providers that receive both publicly funded health care and VHI patients might prioritize the latter

group (SOU, 2021:80). Two commissions have been active in investigating the regulation of VHI. In June 2022, a commission proposed, among other things, that it should no longer be possible to conduct publicly funded care and receive patients with VHI for the same type of care (Ds, 2022:15).

2.7.2 *Regulation and governance of provision*

Health care legislation is national and consists of laws of obligation, that is, they define the authorities´ (regions and municipalities) and providers' responsibilities towards the country's inhabitants.

Except for the Communicable Diseases Act (*Smittskyddslagen* 2004:168), which aims at providing inhabitants with protection against communicable diseases, public health is not covered in any specific regulation. Instead, it is regulated by national legislation in specific areas, as well as in sections of the Health and Medical Services Act (*Hälso- och sjukvårdslagen* 2017:30).

The PHA is the government's central advisory and regulatory agency in public health and communicable disease control, and it issues regulations and general advice (recommendations) based on governing laws. For more information on regulation and governance of provision of public health, see Section 2.5 Intersectorality and Section 5.1 Public health.

The Health and Medical Services Act is a national framework law that stipulates how health care activities must be organized and conducted. It requires the regions to promote the health of their residents and to ensure equal access to health care. The law applies to all health care providers as well as regions and municipalities as authorities. The scope of municipal health care is described in the Health and Medical Services Act, with reference to the Social Services Act and the Act Concerning Support and Service for People with Certain Functional Impairments.

Provision is also regulated in the Patient Act (*Patientlagen* 2014:821), which aims at strengthening and clarifying patient rights by defining regional obligations concerning patients' integrity, autonomy and involvement. Other laws regulate the responsibility and obligations of staff (The Patient Safety Act, *Patientsäkerhetslagen* 2010:659), confidentiality and patient records (The Patient Data Act, *Patientdatalagen* 2008:355) and the qualifications needed to be able to practise medicine. There is also specific legislation for different target groups, for example The Act on Coordinated Discharge (*Lag om samverkan vid*

utskrivning från sluten hälso- och sjukvård 2017:612), which aims at promoting coordination between regional and municipal providers for patients discharged from inpatient care.

The planning of ambulatory care is conducted by both regions and municipalities; the regions are responsible for the provision of primary care and specialized care, whereas the municipalities are responsible for certain primary care assignments up to nursing level, such as health care in the home and institutional long-term care. The regions are responsible for all inpatient care (see Section 2.2 Organization and Fig. 2.1).

The Dental Care Act (*Tandvårdslagen* 1985:125) is a framework law containing the regulation of dental care providers. It states the specific responsibility for dental care that the regions have, which is to plan dental care based on the needs of their populations, as well as provide dental care for patients up to the year one turns 24 and make sure that patient groups in need of special support are offered dental care. Dental care is part of health care and therefore many health care laws also apply to dental care (see also Section 5.12 Dental care).

Long-term care such as care for elderly individuals and people with functional impairments is regulated by the Social Services Act (*Socialtjänstlagen* 2001:453), which states that older people have the right to receive public services and help at all stages of life. People with functional impairments are entitled to support also under the Act concerning Support and Service for Persons with Certain Functional Impairments (*Lag om stöd och service till visa funktionshindrade* 1993:387). It aims at providing individuals who have extensive impairment with support to live a good and independent life. Health and medical care for patients within long-term care is regulated by The Health and Medical Services Act. More information on long-term care can be found in Section 5.8 Long-term care (also Table 2.1).

In cases of severe mental disorders, there are two separate laws regarding compulsory mental health care: the Compulsory Mental Care Act and the Forensic Mental Care Act. The Forensic Mental Care Act regulates the treatment of people who have committed crimes and are regarded as suffering from a serious mental health problem. The act primarily applies to people who are committed for compulsory mental health care in connection to a crime. The Compulsory Mental Care Act regulates treatment and care of people suffering from serious mental health problems when it is considered that care

should be provided on a compulsory basis, for example, in cases where an individual refuses care and, as a result of his/her mental health problem, is a threat to the safety of others.

National regulation states that health care, dental care and long-term care are to be planned and provided by the regions and municipalities, but they may appoint private providers for delivery of health care services with public funds. There are two laws governing the process of outsourcing health care to private providers – the Public Procurement Act (*Lagen om offentlig upphandling* 2007:1091) and the Act on System of Choice in the Public Sector (*Lag om valfrihetssystem* 2008:962). The Public Procurement Act governs how local authorities should conduct public purchases, when they have chosen to allow private provision. It is largely based on the EU Directive 2004/18/EC concerning public procurement. The Act on System of Choice in the Public Sector states that freedom of establishment applies to all public and private health care and social care providers who fulfil the requirements decided by the region or municipality in a certain area of services. According to the Medical Services Act, the Act on System of Choice in the Public Sector applies to primary care at a national level. Hence, the regions are obliged to apply this act, which means that freedom of establishment, patient choice and payments following the choice of patients apply in primary care.

Regions regulate the establishment of new private primary care practices that are eligible for public funding by requirements on providers. In primary and specialized care financed by the regions, such locally determined requirements primarily focus on clinical competencies, opening hours and accessibility, and adherence to clinical guidelines. A private health care provider must have an agreement with the region to be publicly reimbursed. If the private provider does not have an agreement, the patient will have to pay the full charge to the provider. However, there are private providers (physicians and physiotherapists) who are reimbursed by the regions based on earlier national regulation (*nationella taxan*). This old principle for reimbursement of providers operates in parallel, and sometimes in conflict, with more recently adopted principles of payment to private providers. Therefore, the government has assigned a commission to investigate possibilities to modify the current system. In 2022, as part of an ongoing primary care reform, it was introduced into legislation that patients' choice of providers within primary care must take place through listing, which is only possible at PCCs that are operated by the

regions or have an agreement with a region. The aim of the 2022 primary care reform was to increase continuity and quality for patients as well as increasing stability and predictability for the organizations. However, the patient is still free to choose a different provider, but the possibility to change PCC is limited to two times per year. For more information on the provision of primary and specialized care, see Chapter 5 Provision of services.

The NBHW is the government's central advisory and regulatory agency in the field of health services, health protection, dental care and social services (see Section 2.2 Organization). It issues regulations and general advice (recommendations) based on governing laws. The NBHW also issues legitimation for 21 professional groups, including physicians, dentists and registered nurses. Regulations produced by NBHW state that regular, systematic and documented work should be conducted to ensure the quality of care. Furthermore, all health care workers are formally obliged to participate in quality assurance programmes.

The IVO is responsible for supervision of health care, health care staff, social services and activities according to the Act concerning Support and Service for Persons with Certain Functional Impairments. The authority is also responsible for certain permit checks. MPA, TLV and NBHW are responsible for quality assurance in the areas of pharmaceuticals and medical devices (see Section 2.7.3 Regulation of services and goods).

There are several actors involved in non-regulatory quality assurance of different aspects of the health care system, apart from the quality assurance performed by the authorities themselves (regions and municipalities and supervisory national authorities). They include SBU, AHCSA, SALAR and RKA (*Rådet för främjande av kommunala analyser*), which monitor health and medical care results, interventions, and evaluate the development of overall health care quality, efficiency and equality and resource use (see Section 2.6 Health information systems).

TABLE 2.1 Overview of the regulation of providers

	LEGISLATION	PLANNING	LICENSING	PRICING/ TARIFF SETTING	QUALITY ASSURANCE	PUBLIC PURCHASING/ FINANCING
Public health services	There is not one single legislation governing public health, instead it is included in many areas	National government and agencies, PHA, regions, municipalities	n/a	n/a	PHA, regions, municipalities	Mainly regions and municipalities
Ambulatory care (primary and secondary care)	HSL, LOV, LOU, The Patient Act, The Patient Safety Act	Regions, municipalities	Regions, municipalities	Regions, municipalities	IVO, NBHW, SBU, AHCSA, SALAR, Regions and municipalities	Regions, municipalities
Inpatient care	See above	Regions	NBHW, regions	Regions	IVO, NBHW, SBU, AHCSA, SALAR and regions	Regions
Dental care	The Dental Care Act	Regions, SIA	NBHW and regions	TLV, dental clinics	IVO, NBHW, SBU, AHCSA, SALAR, SIA	Regions, SIA
Pharma-ceuticals	The Medical Products Act	National government, agencies and regions	MPA	TLV	MPA, SBU, NBHW, SALAR, TLV	The national government, regions
Long-term care	The Health and Medical Services Act, the Social Services Act	Municipalities	Municipalities	Municipalities, the national government	IVO, NBHW, SBU, AHCSA, SALAR	Municipalities
University education of personnel	The Higher Education Act (*Högskolelag* 1992:1434)	See Section 4.2.1 Planning and registration of human resources	n/a	n/a	Swedish Higher Education Authority (UKÄ)	The national government

Notes: AHCSA: the Agency for Health and Care Services Analysis/*Myndigheten för vård- och omsorgsanalys;* HSL: Health and Medical Services Act/*Hälso- och sjukvårdslagen;* IVO: the Health and Care Inspectorate/*Inspektionen för vård och omsorg;* LOU: the Public Procurement Act/*Lagen om offentlig upphandling;* LOV: Act on System of Choice in the Public Sector/*Lag om valfrihetssystem;* MPA: the Medical Products Agency/*Läkemedelsverket;* NBHW: the National Board of Health and Welfare/*Socialstyrelsen;* PHA: The Public Health Agency of Sweden/*Folkhälsomyndigheten;* SALAR: Swedish Association of Local Authorities and Regions/*Sveriges Kommuner och Regioner;* SBU: the Swedish Agency for Health Technology Assessment and Assessment of Social Services/*Statens Beredning för Medicinsk och Social Utvärdering;* SIA: the Swedish Social Insurance Agency/*Försäkringskassan;* TLV: the Dental and Pharmaceutical Benefits Agency/*Tandvårds- och Läkemedelsförmånsverket;* UKÄ: Swedish Higher Education Authority/*Universitetskanslerämbetet.*

Source: Authors' own compilation.

2.7.3 *Regulation of services and goods*

Basic benefit package

The publicly financed health system covers public health and preventive services, primary care, inpatient and outpatient specialized care (somatic and psychiatric/mental health), emergency care, rehabilitation services, functional impairment support services, patient transport support services, social services and long-term care. Inhabitants also benefit from subsidized outpatient pharmaceuticals, outpatient medical devices and dental care (see also Section 2.7.4 Regulation and governance of pharmaceuticals and Section 5.6 Pharmaceutical care).

The ethical platform and the general guidelines for priorities in health and medical care on which the parliament has decided aim to clarify and strengthen the goal of care on equal terms, a principle that has been valued for a long time in Swedish health and medical legislation (Government Bill 1996/97:60). The ethical platform consists of three ethical principles that aim to guide priorities in health care in Sweden:

- The human value principle: all human beings have an equal entitlement to dignity, and should have the same rights, regardless of their status in the community.
- The need and solidarity principle: those in greatest need take precedence in medical care. Thus, people with more severe diseases are prioritized over people with less severe conditions.
- The cost-effectiveness principle: when a choice has to be made from different health care options, there should be a reasonable relationship between the costs and the effects, measured in terms of improved health and improved quality of life.

The ethical platform is deliberately designed not to provide detailed guidance on how health care should be delivered and managed, among other things due to regional self-governance (ACHSA, 2020a). Based on the ethical platform, there are four priority groups to guide decisions about resource use at the political and administrative level as well as in clinical practice.

- Priority group 1: Life-threatening acute conditions, diseases that lead to permanent impairment or premature death without treatment, severe chronic diseases, palliative care and end-of-life care, care of people with reduced autonomy (patients who, for

various reasons, find it difficult to assert their right to care and a dignified existence)

- Priority group 2: Prevention, habilitation and rehabilitation
- Priority group 3: Less severe acute and chronic conditions
- Priority group 4: Care for reasons other than illness or injury.

Health technology assessment

Under Swedish law, health care staff must work in accordance with best available clinical evidence and generally accepted standards of medical practice. Evidence, based on research results and comprehensive clinical experience, should guide the delivery of care. There are four agencies at the national level working with health technology assessment: SBU, TLV, NBWH, and the National System for Knowledge-driven Management, which is coordinated by SALAR (Shah et al., 2014). For a general description of these authorities, see also Section 2.2 Organization.

SBU has the mandate of the government to conduct systematic literature reviews and assess health care technologies from a medical, economic, ethical and social point of view. SBU reviews the benefits, risks and costs of methods used in health care delivery, with the aim of identifying which method is the most appropriate for treating a specific disease and patient group, but also to determine which methods are ineffective or not cost-effective, so that they can be avoided. SBU also identifies important knowledge gaps, that is, areas in which further research is urgently needed.

The main health technology assessment body for pharmaceuticals is TLV, which assesses the cost-effectiveness of both prescription and hospital drugs. Since 2002, TLV has the mandate to decide if a pharmaceutical should be included in the national reimbursement scheme through value-based pricing (see Section 2.7.4 Regulation and governance of pharmaceuticals).

NBHW is commissioned by the government to provide evidence-based guidelines for the care and treatment of patients. The guidelines are produced in collaboration with other actors, such as SBU, MPA and TLV. The overall goal is to contribute to the effective use of health care resources, allocated on the basis of need, and governed by open and transparent decisions on priorities. The guidelines include recommendations for decisions on priority setting, and provide national support to assist regions and health care providers in establishing disease-management programmes and setting priorities. Three versions of the guidelines should normally be published: one for health care

decision-makers, one for health care personnel/staff, and one for patients and their relatives. When setting the guidelines, the Board members consider the three basic ethical principles (see above). As directed by the government, the Board must report on how the guidelines affect the practice of medicine (Ministry of Health and Social Affairs, 2020a). Despite national guidelines, variation remains in the care and treatment between regions and providers.

Further knowledge support is produced through the National System for Knowledge-driven Management. The system is formed through a collaboration between the regions and SALAR, and the objective is to deliver knowledge-based, equal and resource efficient care of high quality. Further, the system seeks to reduce regional differences in health care by providing evidence-based care programmes, recommendations and clinical pathways (see also Section 2.2 Organization).

2.7.4 *Regulation and governance of pharmaceuticals*

The Medicinal Products Act (*Läkemedelslag* 2015:315) is a framework law regulating all activities connected with pharmaceuticals. The fundamental requirements for medicinal products stated in the Medical Products Act also apply to natural remedies. Most of the legislation is regulated at EU level, and such legislation is introduced in regulations published by MPA, which is the government agency responsible for approving new pharmaceutical products and granting permission for pharmaceutical production. Its activities are regulated by several laws, including the Medicinal Products Act. MPA is also responsible for providing information about pharmaceuticals to health care and the public, giving permission to carry out clinical trials, approving licences and controlling natural remedies and other medicine-related products. Further, all active agents related to pharmaceutical production must have, or be connected to an actor that has, a Good Manufacturing Practice certificate, which is a regulatory framework governing production.

NBHW (as well as other government authorities) develops national guidelines, including national regulations and general guidelines on the prescription and handling of medicines in health care (HSLF-FS 2017:37) and priorities within broad disease groups, which includes guidelines on pharmaceuticals, taking cost-effectiveness into consideration.

Since 1998, prescription pharmaceuticals have been the financial responsibility of the regions. However, subsidies are decided within the

national reimbursement scheme and financing is supported by a targeted national government grant to the regions (see Chapter 3 Financing). The decision whether to include a pharmaceutical in the reimbursement scheme is made by TLV (see Section 2.2 Organization). The company marketing the pharmaceutical applies to TLV, then TLV decides on whether the pharmaceutical should be included, in which form of packaging and determines the price according to the Act on Medical Benefits.

The decision to subsidize a pharmaceutical is made based on the three principles that constitute the ethical platform (see Section 2.7.3 Regulation of services and goods) and through assessing whether the cost is considered reasonable in relation to the benefit the treatment provides, so called value-based pricing. A societal perspective is used when TLV assesses the cost-effectiveness of a pharmaceutical and makes decisions regarding reimbursement, namely, that the price of a drug should reflect its value to society rather than the marginal cost of production or prices in other countries. All costs and benefits related to treatment should be considered, irrespective of where in society they occur. Preferably the cost-effectiveness should be expressed as costs per quality-adjusted life-years when companies apply for reimbursement. The Swedish reimbursement system is mainly product oriented. This means that pharmaceuticals are either granted or denied reimbursement status for the whole of the approved area (by MPA). TLV may, however, restrict the reimbursement of a pharmaceutical to a narrower patient group than it is approved for by MPA. Regarding new products, TLV makes decisions on applications from companies that want their medicines to be eligible for reimbursement. The Swedish government has set a time limit of 120 days for decisions on reimbursement and pricing.

To open a pharmacy, it is necessary to obtain permission from MPA. Pharmacies are required to provide all prescribed pharmaceuticals within 24 hours. Since 2018, the online sales of pharmaceuticals have increased by over 200% and the market share of online sales was just below 20% for over-the-counter pharmaceuticals and 13% for prescription pharmaceuticals in 2021, which is very high compared with other European countries (The Swedish Pharmacy Association, 2022). The sale of selected over-the-counter drugs, such as nasal sprays and painkillers, in licensed facilities, such as supermarkets and online vendors, has been allowed since 2009.

The distribution of pharmaceuticals is highly regulated, and even though the pharmacy market has been re-regulated, market actors have largely continued to work according to a so-called single channel system

(Direct-to-Pharmacy). Some 98% of pharmaceuticals are distributed via one of two distributors, Tamro and Oriola (SOU, 2021:19). The pharmacies therefore have limited opportunities to influence the terms of sales. However, some pharmacy chains have their own solutions for the distribution of over-the-counter pharmaceuticals, parallel imported pharmaceuticals and other goods sold in pharmacies.

Since 2002, generic substitution has been mandatory between medically equivalent drugs. The pharmacy dispenses the least expensive generic drug or parallel imported drug available, regardless of what brand name the prescribing physician has written on the prescription. Physicians may oppose substitution for medical reasons, but this rarely happens. If a patient refuses a generic product, they must pay the difference in price between the generic product and the more expensive branded pharmaceutical out of pocket.

At the local level, regions have formulary committees (*läkemedelskommittér*) with the responsibility to make recommendations concerning the use of pharmaceuticals in primary care and other outpatient settings. By law, every region should have at least one formulary committee [according to the Medical Products Committees Act (*Lag om Läkemedelskommittéer* 1996:1157)].

The NT-council (see Section 2.2 Organization) is involved in the governance of pharmaceuticals through provision of recommendations to the regions concerning the usage of certain new and expensive pharmaceuticals. The council give recommendations about pharmaceuticals that have already been approved by MPA and the European Medicines Agency, with the objective of evaluating the benefits of pharmaceuticals in relation to the costs and other treatment options. For pharmaceuticals for inpatient care (hospital pharmaceuticals), the NT-council issues recommendations to the regions in collaboration with TLV.

The regulation of medicinal products is similar to that of pharmaceuticals. MPA works to ensure that medicinal products are safe, effective and of good quality and TLV decides which medicinal products are to be included in the subsidies system.

2.7.5 *Regulation of medical devices and aids*

Medical devices and aids are regulated by two EU directives, 2017/745 and 2017/746, which apply to all EU countries. The purpose of the directives is to improve patient security through stricter assessment and monitoring of

products introduced in the market (EUR-LEX, 2020; EUR-LEX, 2022). All actors in the supply chain are responsible for guaranteeing product safety, and products that fulfil the legal requirements are free to enter the market within the EU. There are some country-specific regulations alongside the EU directives. For example, it is legally required that labelling, patient information leaflets and other information are available in Swedish.

MPA is responsible for monitoring that the regulations are being followed, through following up incidents and serious negative events and by monitoring manufacturers and other economic actors. NBHW is responsible for regulations related to the use of medical devices within health care and products that are self-made, while IVO is responsible for monitoring the use of medical devices and aids within health care.

2.8 **Person-centred care**

2.8.1 *Patient information*

The Patient Act regulates patients' rights in relation to the information that should be accessible to them by provision from regions and municipalities. Information should always be given so that the patient understands it, and adjusted to the patient's capabilities if needed, for instance in cases that require an interpreter or written information.

All regions provide information about how and where to seek care through their websites. There are also several national projects aimed at improving access and use of information for patients and citizens. The initiative 1177.se is a collaborative project between all regions in Sweden. The website 1177.se provides information written by medical staff about pharmaceuticals, different medical conditions, pathways for seeking care and other subjects. There is also a chat-service where people can ask questions and get answers quickly (Table 2.2). Further, by calling 1177, which is open 24/7, medical staff are available to give advice about medical conditions and where or at what level to seek care if necessary. Citizens may also create their own account on the web site where they can, for instance, make health care appointments, choose care providers, renew prescriptions, obtain information about test results and access their patient records. The web site offers 26 language choices, including Swedish sign language and Easy Swedish (see Section 2.6 Health information

systems). For information about pharmaceuticals – how they work, how to take them, combinations, side-effects or how to store them – a patient can also call the medicine's information service (*läkemedelsupplysningen*) provided by MPA.

TABLE 2.2 Patient information

TYPE OF INFORMATION	IS IT EASILY AVAILABLE?	COMMENTS
Information about statutory benefits	Yes	There is information easily available through 1177, both online and through 24/7 telephone information service.
Information on hospital clinical outcomes	Not in general	Information on clinical outcomes is reported through various quality registries, mostly on a regional level. Transparency varies.
Information on hospital waiting times	Available, but not easily	Statistics are updated regularly on www.skr.se/vantetiderivarden, but on a regional level. Information on waiting times for planned surgery is also available from SPOR, the perioperative quality register (www.spor.se).
Comparative information about the quality of other providers (for example, general practitioners)	Yes	Open comparisons based on various indicators are available online at: www.socialstyrelsen.se/statistik-och-data/oppna-jamforelser
Patient access to own medical records	Yes	Patients can access their own records at www.1177.se. Regional variation in access to content.
Interactive web or 24/7 telephone information	Yes	1177 has an interactive website and provides 24/7 telephone information.
Information on patient satisfaction collected (systematically or occasionally)	Yes	SALAR conduct annual surveys and reports the data through the National Patient Survey and the National Health Care Barometer Survey.
Information on medical errors	Available, but not easily	There are systems for collecting and evaluating medical errors through IVO, HSAN and Patient Advisory Committees, and documentation is available through the principle of publicity.

Note: HSAN: Health Care Liability Committee/*Hälso- och Sjukvårdens Ansvarsnämnd;* IVO: the Health and Care Inspectorate/*Inspektionen för vård och omsorg;* SALAR: Swedish Association of Local Authorities and Regions/*Sveriges Kommuner och Regioner*.

Source: Authors' own compilation.

A patient-reported survey from 2020 found that around 85–90% of patients were positive about the information they received from their provider during consultations. Another survey showed that patients with higher education were more satisfied with the provided information, which is problematic in relation to Sweden's health care objective to provide equal care for all. Further research suggests that patients are passive in their search for information when choosing a primary care provider (see Section 2.8.2 Patient choice).

The COVID-19 pandemic has led to an increase in the use of distance services such as 1177. This telephone service was used intensively in 2020, both due to worries from the population and to obtain medical advice without physical visits to health centres (AHCSA, 2021a). Moreover, testing and vaccination for COVID-19 were administered through the website.

2.8.2 *Patient choice*

Choice of primary care provider for the population combined with freedom of establishment for private providers that fulfil the requirements of the region became mandatory in Sweden in January 2010. Patients can register with any public or private provider approved by the region (Table 2.3). The Patient Act states that care should be person-centred and that patients should be involved in their care. In general, patients must consent to treatment and are free to decline care and to participate in the choice of treatment (see Section 2.8.1 Patient information).

The regions decide which primary care services are to be provided and impose requirements and conditions that apply to both public and private providers. The original intention for competition was that providers should compete on the basis of quality. There is, however, evidence that individuals' choice of primary care provider is generally not guided by information on differences in quality (see for instance Hoffstedt, Fredriksson & Winblad, 2021). Instead, research suggests that personal motivations and contextual factors are more important when people switch primary care provider (Hoffstedt et al., 2020). Research on geographical equity has also found that after the reform, PCCs were established in areas with fewer older adults living alone and fewer single parents. However, these were the only socioeconomic variables with significant effects, and the reform does not seem to have had an impact on geographical equity in relation to mean income, percentage of immigrants, education, unemployment and children under 5 years (Isaksson, Blomqvist & Winblad, 2016).

TABLE 2.3 Patient choice

TYPE OF CHOICE	IS IT AVAILABLE?	DO PEOPLE EXERCISE CHOICE? ARE THERE ANY CONSTRAINTS (FOR EXAMPLE, CHOICE IN THE REGION BUT NOT COUNTRYWIDE)? OTHER COMMENTS?
Choices around coverage		
Choice of being covered or not	No	Health care is a welfare service covered for almost everyone who lives or works in Sweden.
Choice of public or private coverage	No	Only for parallel VHI, which is limited to care by private providers and does not cover, for instance, emergency care.
Choice of purchasing organization	No	Only for VHI, which is offered by various insurance companies.
Choices of provider		
Choice of primary care provider	Yes	Patients are free to choose their primary care provider according to national regulations of choice (Act on System of Choice in the Public Sector).
Direct access to specialists	Yes/No	Different regions have different regulations in relation to specialist care, in some cases a referral to specialist care is needed and in others the patient can have direct access.
Choice of hospital	Yes/No	Emergency care is part of outpatient care and therefore patients in theory have free choice in the country. Inpatient care at hospitals is not part of the freedom of choice, and regulation varies between regions.
Choice to have treatment abroad	Yes	Necessary care that cannot wait until the patient gets home is covered by the EU Directive on Patients' Rights in Cross-border Health Care (2011/24/EU) in EU countries as well as Iceland, Norway, Liechtenstein and Switzerland and reimbursed by the patients' home country. However, patient fees are paid out of pocket. It is also possible to get planned care in EU countries and Switzerland.
Choice of treatment		
Participation in treatment decisions	Yes	see Section 2.8.1. Patient information
Right to informed consent	Yes	see Section 2.8.1. Patient information
Right to request a second opinion	Yes, for serious and life-threatening conditions	see Section 2.8.1. Patient information
Right to information about alternative treatment options	Yes	see Section 2.8.1. Patient information

Note: EU: European Union; VHI: voluntary health insurance.

Source: Authors' own compilation.

2.8.3 *Patient rights*

Patient rights are mainly regulated in the Patient Act and the Patient Injury Act (*Patientskadelagen* 1996:799). The Patient Act regulates what information you have a right to receive as a patient (see Section 2.8.1. Patient information), that you are free to choose a primary care provider together with outpatient specialist care within the country (see Section 2.8.2 Patient choice) and that you have the right to a second medical opinion in the case of serious or life-threatening illness or injury. Further, it regulates the patients' rights to make complaints and receive compensation in the case of dissatisfaction or malpractice (see Table 2.4).

An evaluation of the Patient Act revealed that it has had little impact on patients' experience of the health care system, and there are few signs of improved practical implementation of the act (ACHSA, 2021b).

The Patient Injury Act contains regulations concerning the right to patient compensation in the case of injury. The regulations are enforced differently depending on which actors are involved (see Table 2.4).

TABLE 2.4 Patient rights

	Y/N	COMMENTS
Protection of patient rights		
Does a formal definition of patient rights exist at a national level?	Yes	The Patient Act (2014) and the Patient Injury Act (1996) regulate patients' rights.
Are patient rights included in legislation?	Yes	See above
Does the legislation conform with WHO's patient rights framework?	Yes	The government launched a strategy for Sweden's cooperation with the WHO for 2021–2025, and Sweden's public health objectives are formulated in accordance with Agenda 2030.
Patient complaint avenues		
Are hospitals required to have a designated desk responsible for collecting and resolving patient complaints?	No	The process of collecting complaints varies between regions and providers. See other complaint avenues below.
Is a health-specific Ombudsman responsible for investigating and resolving patient complaints about health services?	No	IVO is a health-specific agency responsible for investigating more serious events occurring in health care, and events where patients' decisiveness, integrity or legal position has been seriously implicated. In cases where practitioners' legitimation is questioned, HSAN investigate and test the case. See other complaint avenues below.

	Y/N	COMMENTS
Are there other complaint avenues?	Yes	Complaints should be made directly to the care centre, which is obliged to collect complaints or opinions related to health care services and provide a response as soon as possible. The response should be given in such a way that the recipient understands it. Further, regions' patient boards can support patients in the complaints processes and the patients could also report complaints to IVO. In the case of experienced discrimination, the patient should report complaints to the Ombudsman against discrimination. If a patient suspects that a crime has been committed, this should be reported to the police. If a patient finds that their personal data have been managed incorrectly, complaints can be made to the IMY.
Liability/Compensation		
Is liability insurance required for physicians and/or other medical professionals?	Yes	According to the Patient Injury Act, providers are required to have patient insurance that covers injuries included in the regulations.
Can legal redress be sought through the courts in the case of medical error?	Yes	Compensation can be sought through the patient's insurance, but in the case of dissatisfaction with the decision made by the insurance company, patients are able to sue the provider, insurance company or pharmaceutical company, and request patient injury compensation in court. In this case, the patient must prove that a serious error has been made and that the provider is liable for damages.
Is there a basis for no-fault compensation?	Yes	There is some no-fault compensation that patients can seek through SIA. The following compensations can be covered by the social insurance: rehabilitation allowance, sickness compensation, additional cost reimbursement, temporal parental allowance.
If a tort system exists, can patients obtain damage awards for economic and non-economic losses?	Yes	See above
Can class action suits be taken against health care providers, pharmaceutical companies, etc.?	Yes	See above

Notes: HSAN: Health Care Liability Committee/*Hälso- och Sjukvårdens Ansvarsnämnd;* IMY: the Swedish Authority for Privacy Protection/*Integritetsskyddsmyndigheten;* IVO: the Health and Care Inspectorate/*Inspektionen för vård och omsorg;* SIA: the Swedish Social Insurance Agency/*Försäkringskassan;* WHO: World Health Organization.

Source: Authors' own compilation.

2.8.4 *Patients and cross-border health care*

Patients have the right to seek outpatient care at hospitals or with specialists (both private and public) throughout the country, irrespective of which region they live in based on agreements between the regions and the Ministry of Health and Social Affairs. Based on agreements between the regions, there is the possibility to receive inpatient care in other regions, but it often requires approval from the home region.

Cross-border health care in EU countries is regulated by the Directive on Patients' Rights in Cross-border Health Care (2011/24/EU), and the care will be reimbursed by the patients' home country (see Section 2.8.2 Patient choice). In 2021, 1 218 Swedish patients received compensation from the Social Insurance Agency for planned, non-emergency, treatment within the EU. Of these, around 600 received care in Denmark and about 300 in Finland. A smaller number of patients received care in Spain, Germany and Poland.

3

Financing

Chapter summary

- Health care expenditure accounted for 11.4% of Sweden's GDP (2020), ranking Sweden fourth in the European Union in terms of the share of GDP spent on health. Per capita health expenditure was 6 347 US dollars adjusted for differences in purchasing power (US$ PPP), ranking Sweden seventh.

- Health expenditure from public sources is quite stable at 86% of total expenditure (2020), ranking Sweden third in the EU. The majority (93%) of private health financing comes from households' out-of-pocket payments, representing about 13% of current health expenditure. VHI represents less than 1% of total expenditure and about 4% of private health expenditure.

- Health care is primarily funded through taxes levied by the regions and the municipalities (56%) and supplemented by the national government through, predominantly taxed–financed, grants (25%). Some 5% of public spending comes from other regional and municipality sources, such as rents and sales.

- The Swedish health system provides extensive coverage in terms of breadth, scope and depth with the exception of user charges for dental care and medical devices and aids.

3.1 Health expenditure

Current health expenditure in Sweden has increased from 10.4% of GDP in 2011 to 11.4% in 2020 (Table 3.1). During the COVID-19 pandemic year 2020, there was a sharp increase in health care spending as share of GDP of 0.6%. Otherwise, the share has been stable since 2013. Besides the pandemic year, health expenditure has therefore followed the growth in GDP, which during the period 2013–2019 averaged 2.5% per year in fixed prices. The EU average follows a similar trend but at a lower share of GDP (Fig. 3.2). In 2011, the calculation of health care expenditure was altered, when part of the elderly care expenditure was re-classified as health care. This meant that health care expenditure increased by 2.1% as a share of GDP between 2010 and 2011.

Sweden is ranked fourth among countries in the EU, spending 0.9 percentage points higher than the Nordic average and 2.2 percentage points above the EU average (Fig. 3.1). Sweden's health care expenditure (US$ PPP) per capita was 6 347 in 2020, which was 50% higher than the EU average (4 224), lower than in Norway (7 168), similar to Denmark (6 351) but higher than in Finland (4 897) (Fig. 3.3).

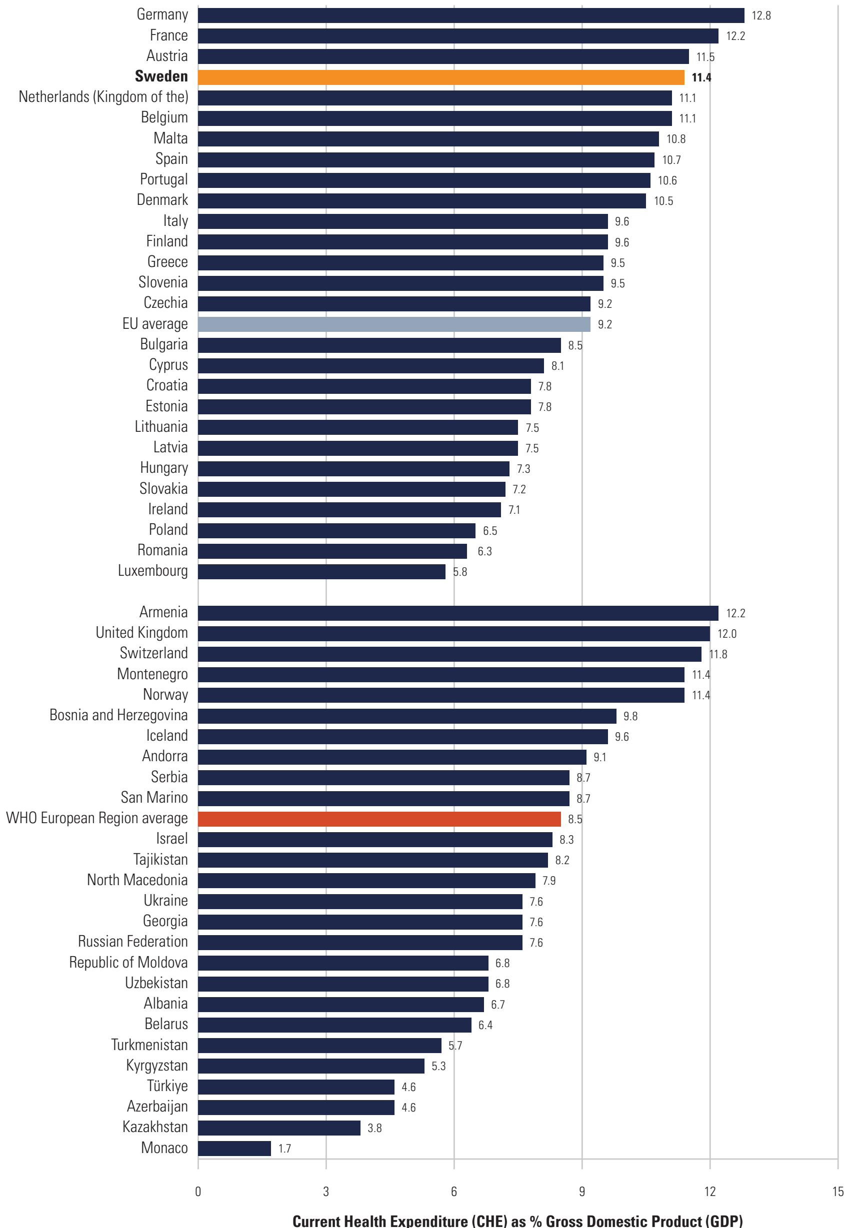
TABLE 3.1 Trends in health care expenditure in Sweden, 2000 to 2020 (selected years)

	2000	2005	2010	2011	2015	2019	2020
Current health expenditure per capita (US$ PPP)	2 173	2 797	3 527	4 663	5 333	5 942	6 347
Current health expenditure as % of GDP	7.3%	8.2%	8.3%	10.4%	10.8%	10.8%	11.4%
Public expenditure on health as % of total expenditure on health	84.5%	82.3%	82.5%	84.5%	84.0%	85.1%	85.9%
Public expenditure on health per capita (US$ PPP)	1 835	2 302	2 909	3 940	4 478	5 058	5 452
Private expenditure on health as % of total expenditure on health	15.5%	17.7%	17.5%	15.5%	16.0%	14.9%	14.1%
Private expenditure on health per capita (US$ PPP)	11.7%	12.8%	13.6%	17.7%	18.4%	18.8%	18.8%
Government health spending as % of total expenditure on health	6.2%	6.7%	6.9%	8.8%	9.1%	9.2%	9.8%
OOP payments as % of total expenditure on health	14.5%	16.6%	16.4%	14.6%	14.9%	13.7%	13.0%
OOP payments as % of private expenditure on health	93.5%	93.8%	93.7%	94.2%	93.1%	91.9%	92.5%
VHI as % of private expenditure on health	1.5%	1.8%	3.1%	3.1%	3.6%	4.3%	4.4%

Note: OOP: out-of-pocket; US$ PPP: US dollars adjusted for differences in purchasing power; VHI: voluntary health insurance.

Sources: Statistics Sweden, 2022h; WHO, 2022.

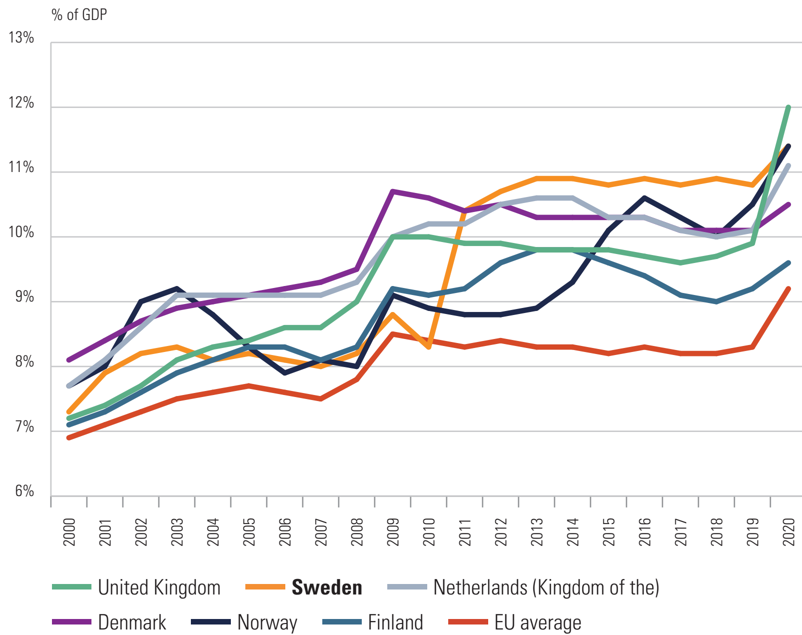
FIG. 3.1 Current health expenditure as a share (%) of GDP in the WHO European Region, 2020



Notes: EU: European Union; GDP: gross domestic product; WHO: World Health Organization. Albania data are from 2018.

Source: WHO, 2022.

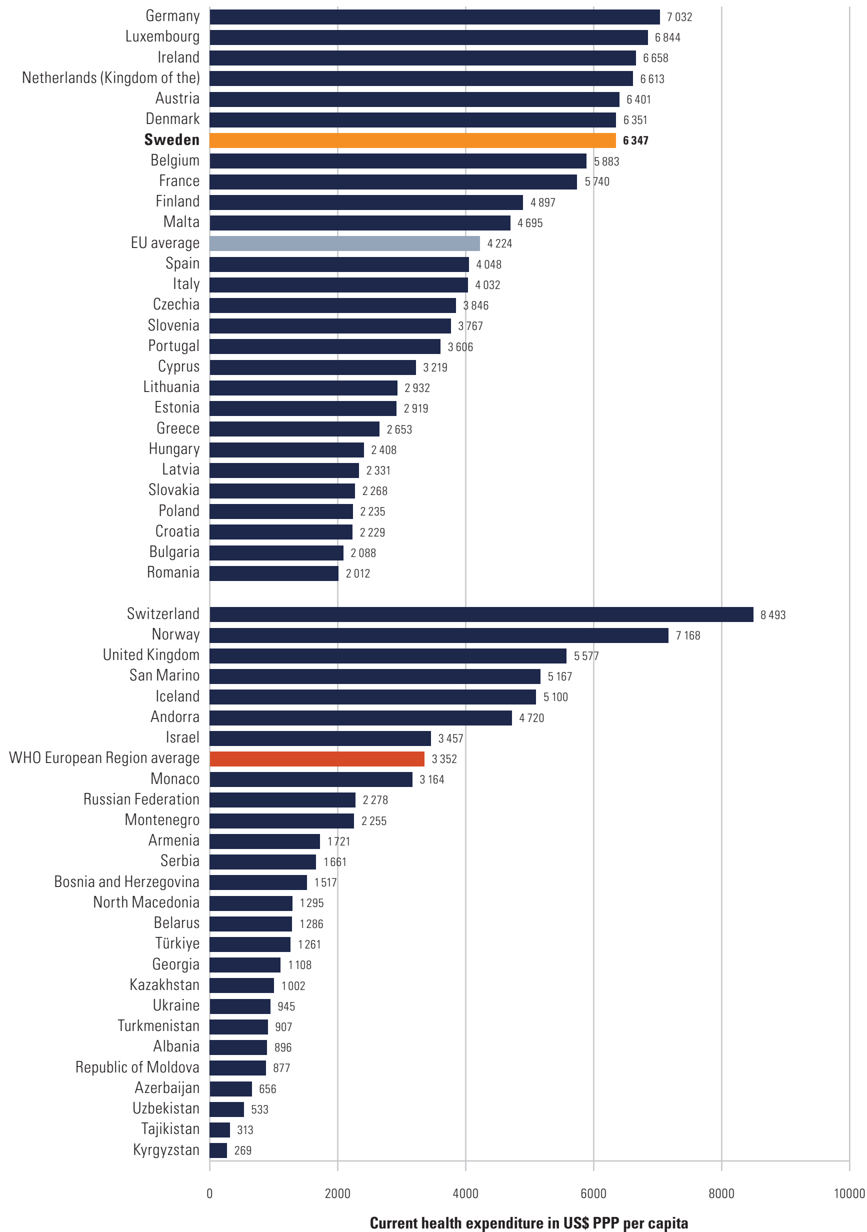
FIG. 3.2 Trends in current health expenditure as a share (%) of GDP in Sweden and selected countries, 2020



Note: EU: European Union; GDP: gross domestic product.

Source: WHO, 2022.

FIG. 3.3 Current health expenditure in US$ PPP per capita in the WHO European Region, 2020



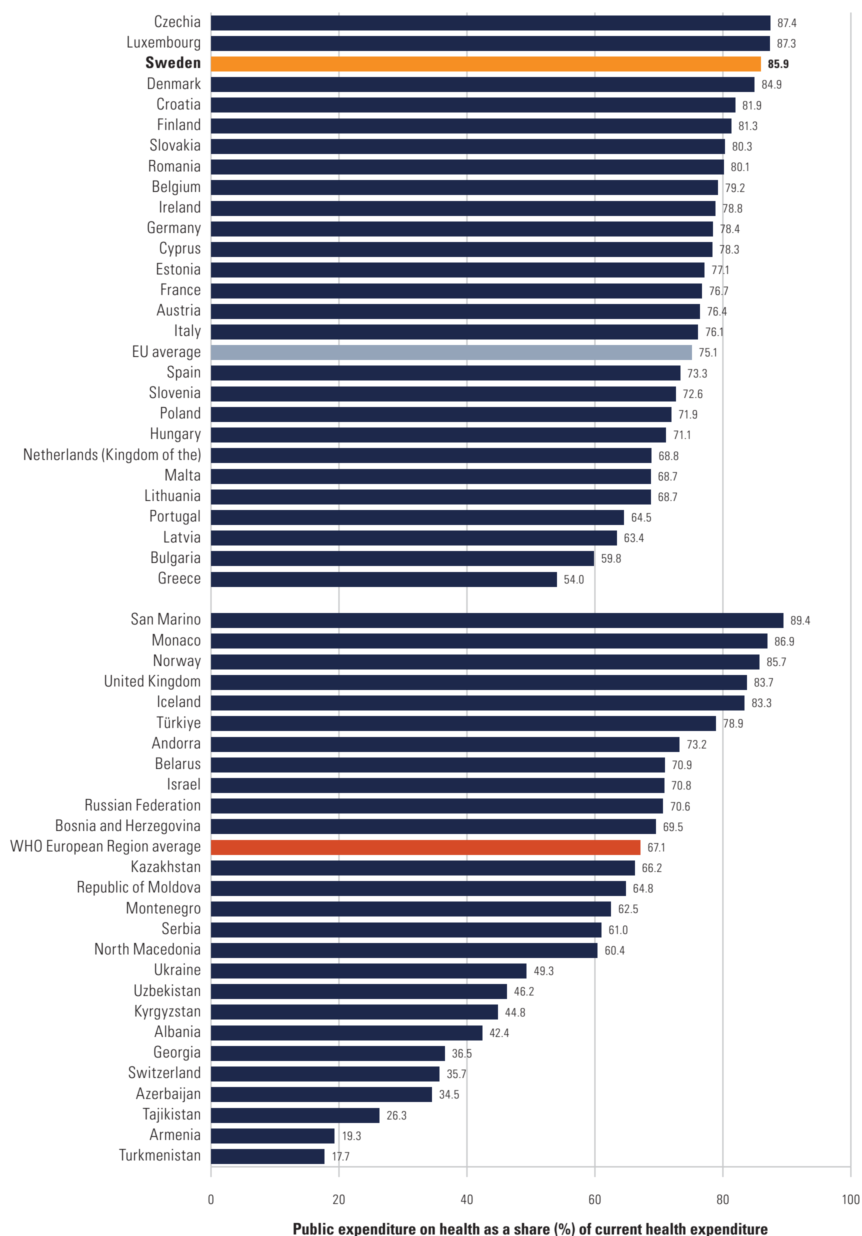
Notes: EU: European Union; US$ PPP: US dollars adjusted for differences in purchasing power; WHO: World Health Organization. Albania data are from 2018.

Source: WHO, 2022.

About 86% of all expenditures on health care in 2020 were public expenditures in Sweden. The share of public spending on health care is well above the EU average (75.1%) and only Czechia and Luxembourg have a higher share within the EU (Fig. 3.4). Publicly financed spending on health care as a proportion of all health care spending has increased by 1.4 percentage points since 2011, especially during the pandemic year 2020 (Table 3.1). In line with the increased public spending on health, national government spending has also increased. Furthermore, Swedish public expenditure on health as a share of general government expenditure is 18.8%, also well above the EU average (13.9%) (Fig. 3.5).

Private expenditure comes mainly from out-of-pocket (OOP) payments (representing 92.5% of private expenditure) and is discussed in Section 3.4 Out-of-pocket payments. The share of private expenditure declined slightly between 2011 and 2019 (by 0.6%), mostly due to a relative decrease in OOP payments as spending on VHI has increased its proportion within the private expenditure on health care. In 2020 the share of private expenditure decreased by 0.8%, as the entire increase in health care spending as a share of GDP came from public sources as a response to the COVID-19 pandemic.

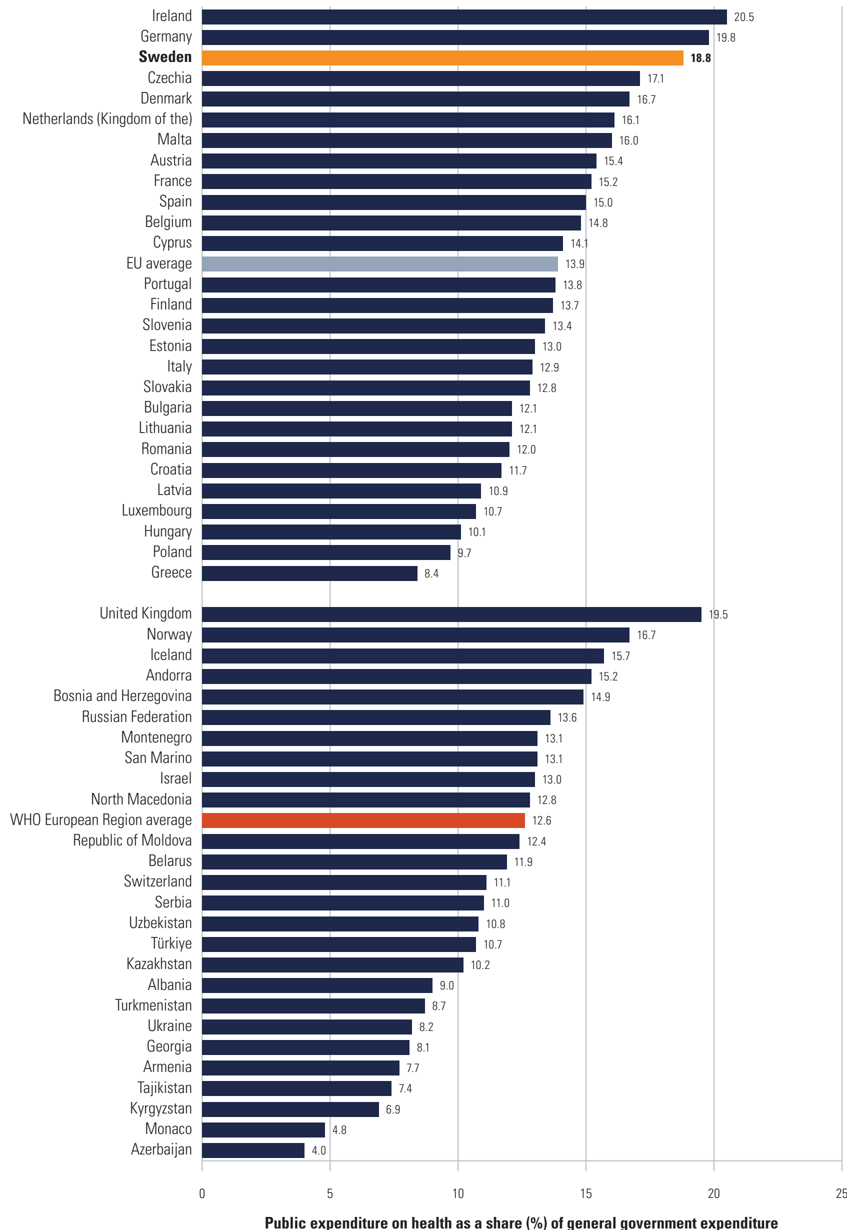
FIG. 3.4 Public expenditure on health as a share (%) of current health expenditure in the WHO European Region, 2020



Notes: EU: European Union; WHO: World Health Organization. Albania data are from 2018.

Source: WHO, 2022.

FIG. 3.5 Public expenditure on health as a share (%) of general government expenditure in the WHO European Region, 2020



Notes: EU: European Union; WHO: World Health Organization. Albania data are from 2018.

Source: WHO, 2022.

The structure of health care expenditure is illustrated in Table 3.2. The table is based on data from the System of Health Accounts (Statistics Sweden, 2022h). Total expenditures on health amounted to 573 billion Swedish kronor (SEK) (EUR 53.9 billion) in 2020, including expenditures for dental care, all pharmaceuticals and all care produced by regions and municipalities.

In 2020, inpatient and outpatient care (including home care and dental care) accounted for just over half of health care costs, elderly care for just over one quarter and medical goods for about 12% (of which pharmaceuticals make up 9%). In comparison with the EU27 (European Union 27 Member States as of 2020), the Swedish expenditure share is significantly higher in elderly care and to some extent in outpatient care, but lower in inpatient care and outpatient drugs. The fact that expenditure on medicines prescribed outside hospital is relatively small is partly because of lower medicine prices and a relatively high use of generics. Expenditures for preventive measures made up 3.3% of total health care expenditure, which is above the EU average (2.9%) (OECD/European Observatory on Health Systems and Policies, 2021).

During the pandemic year 2020, the share of costs for inpatient care and medicines increased. This deviates from the historical trend as the costs between 2011 and 2019 instead decreased for inpatient care and medicines, but increased for outpatient and preventive care. This reflects the ambition of the last 20 years to slow the costs of hospital care by strengthening outpatient care. 2005 2010 2015

In fixed prices, the regions' expenditures on health increased by 14% between 2015 and 2020. Expenditures for primary care increased by 19% and somatic specialized care by 16%, whereas expenditures for psychiatric care increased by 12%, prescription drugs by 15% and all other health care by 4% during this period (SALAR, 2022b). The regions spent SEK 344.5 billion (EUR 31.4 billion) on health care in 2020, where specialized somatic (inpatient and outpatient) hospital care accounted for 47% and primary care for 16%. Specialized psychiatric care accounted for 7%, prescription drugs for 7% and dental care for 3% of the regions' expenditures on health. Of the regions' total expenditures in 2020, about 43% constituted costs for regional staff (salaries and other costs), 17% constituted costs for pharmaceuticals and medical materials, 17% were procurement of health care services and 10% were procurement of other services (SALAR, 2022b).

TABLE 3.2 Expenditure on health 2020 (as % of current health expenditure) according to function and type of financing

	INPATIENT CARE	OUTPATIENT CARE	Whereof day care	Whereof home care	Whereof dental care	LONG-TERM CARE	MEDICAL PRODUCTS	Whereof pharmaceuticals	PREVENTIVE CARE	ADDITIONAL SERVICES	ADMINISTRATION	OTHER	TOTAL
National government	0.0%	0.9%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.1%	**2.0%**
Municipalities	0.1%	0.1%	0.0%	0.0%	0.0%	24.1%	0.2%	0.3%	0.7%	0.0%	0.0%	0.0%	**25.3%**
Regions	20.3%	24.4%	6.0%	1.7%	0.0%	0.3%	6.0%	0.0%	1.7%	4.9%	1.0%	0.0%	**58.6%**
VHI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.5%	**0.6%**
Non profit organisations	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	**0.1%**
Companies	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	40.7%	0.4%	0.0%	0.0%	0.0%	**0.4%**
OOP	0.2%	4.9%	0.1%	0.0%	9.1%	1.8%	6.0%	33.0%	0.1%	0.0%	0.0%	0.0%	**13.0%**
Total	**20.7%**	**30.4%**	6.2%	1.7%	16.3%	**26.2%**	**12.2%**	74.1%	**3.3%**	**4.9%**	**1.7%**	**0.6%**	**100.0%**

Notes: OOP: out-of-pocket; VHI: voluntary health insurance.

Source: Statistics Sweden, 2022h.

3.2 Sources of revenue and financial flows

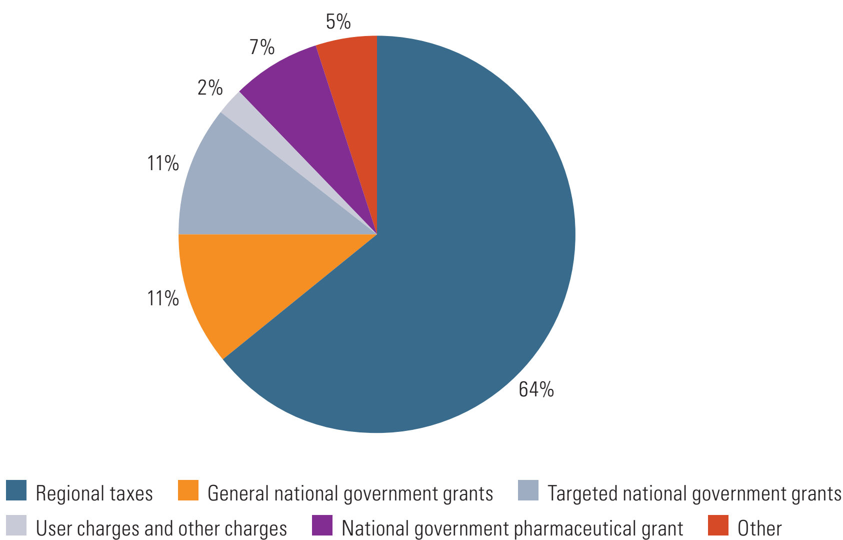
Both regions and municipalities levy proportional income taxes on their respective populations in order to fund health care activities. However, the financing of health care services by local taxes is supplemented by national government grants and by user charges. Specific subsidies for dental care are also paid for by national social insurance, and the Swedish Social Insurance Agency generates revenues primarily through employer payroll fees (Fig. 3.8).

The public share of health care spending can be broken down by government body: the regions' expenditures amounted to about 59%, municipalities 25% and national government 2% in 2020 (Table 3.2) (Statistics Sweden, 2022h). However, these figures from the national accounts only relate to national government direct spending on certain national programmes and investments. In addition, the national government transfers general and targeted grants to local governments. When taking this into account, regional spending constitutes about 42%, municipality spending 19% and national government spending 25% of total spending on health care.

The regional revenues amounted to SEK 423 billion (EUR 39.8 billion) in 2020, where 64% originated from local taxes (Fig. 3.6 and Table 3.3). The corresponding figures for total municipality revenues were SEK 715 billion (EUR 67.3 billion), where financing by local taxes constituted 65% (Fig. 3.7) (SALAR, 2022b). The second largest revenue source for regions and municipalities was national government grants, that can be either general or targeted. General grants are paid per inhabitant and are designed to contribute to equalization across local governments with different tax bases and different spending needs. They are based on a formula that partly reallocates resources across municipalities and regions with the aim of giving different local government bodies the opportunity to maintain similar standards, irrespective of differences in average income and/or need (see Section 3.3.3 Pooling and allocation of funds). Each municipality or region can use this money on the basis of local conditions. Targeted grants must, on the other hand, be used to finance specific activities, often over a specific period of time. A major part of the targeted grant (7.2% of the total regional revenue) takes the form of reimbursement for pharmaceuticals listed in the Drug Benefit Scheme (see Section 3.4 Out-of-pocket payments).

The regions' share of funding via proportional income taxation has decreased significantly since 2015 (from 71.4% to 64.4% in 2020) and the share of funding via various forms of national government grants have increased by approximately the same degree (from 19.7% in 2015 to 28.4% in 2020). The same development may also be seen for the municipalities where the share of national government grants increased from 18.6% in 2015 to 23.4% in 2020.

FIG. 3.6 Sources of total regional revenue, 2020



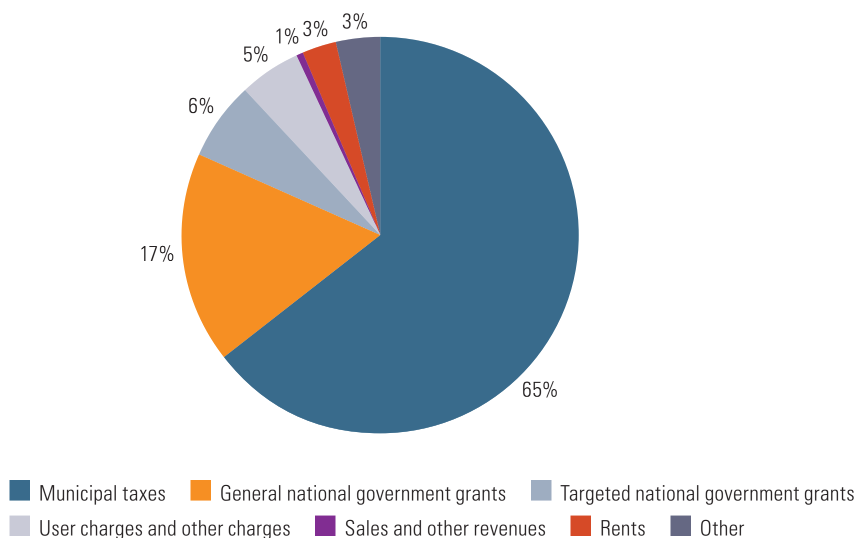
Source: SALAR, 2022b.

TABLE 3.3 Sources of revenue as a percentage of total regional revenue, 2015–2020

	2015	2016	2017	2018	2019	2020
Regional taxes	71%	71%	71%	70%	69%	64%
General national government grants	8%	8%	8%	8%	8%	11%
National government pharmaceutical grant	7%	7%	7%	7%	7%	7%
Targeted national government grants	5%	5%	4%	6%	6%	11%
User charges and other charges	4%	4%	3%	3%	3%	2%
Other	5%	5%	5%	5%	5%	5%

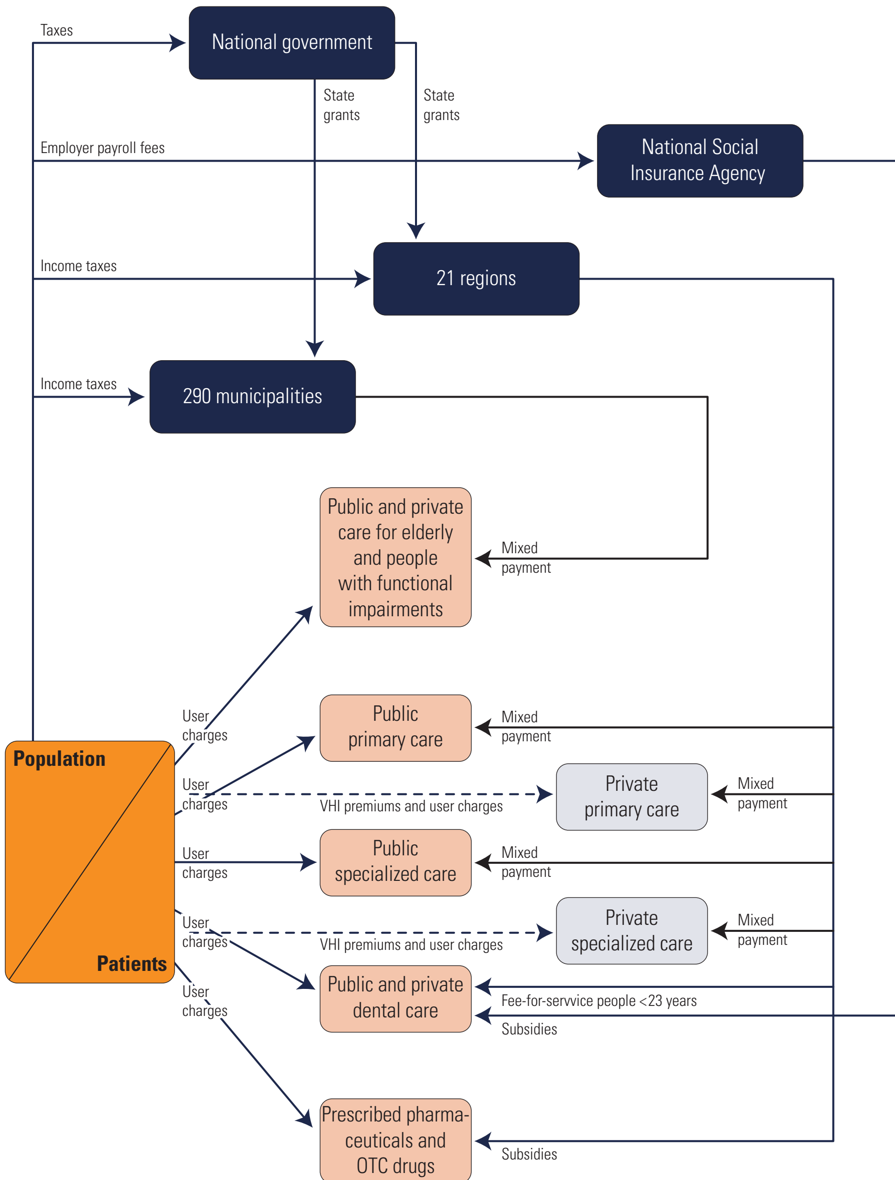
Source: SALAR, 2022b.

FIG. 3.7 Sources of total municipality revenue, 2020



Source: SALAR, 2022b.

FIG. 3.8 Financial flows



Notes: OTC: over-the-counter; VHI: voluntary health insurance.

Source: Authors' own compilation.

3.3 Overview of the statutory financing system

3.3.1 *Coverage*

Breadth: who is covered?

According to the Health and Medical Services Act, the Swedish system provides coverage for all residents of Sweden (for adult asylum seekers and undocumented migrants separate rules apply, see Section 7.2 Accessibility). In addition, emergency coverage is provided to all patients from the EU and the European Economic Area (EEA), and nine other countries with which Sweden has bilateral agreements. The services available are highly subsidized and some services are provided free of charge. Diagnosis and treatment are the principal tasks of medical care, but no basic or essential health care or drug package is defined. Instead, there are some definitions as to what does and does not fall within the domain of health care, and some general guidelines exist as to the priorities of the health care sector.

Scope: what is covered?

There is no predefined benefits package. The Health and Medical Services Act instead states that responsible health care authorities are obliged to provide care on the basis of need to all residents of Sweden in line with the general principles for priorities (see Section 2.7.3 Regulation of Services and Goods) and the financial resources available. At an overall level, the supply of health care services is specified via regulatory authorities in terms of recommended forms of treatment; for example, via health technology assessment assessments or cost-effectiveness analysis for subsidy decisions regarding prescribed medicines. The general principle is that the treatments and medicines that the regulatory authorities regard as cost-effective should be offered to the population, and the interventions that are no longer cost-effective should be phased out. For pharmaceuticals, the rarity of conditions may also be included in the cost-effectiveness analysis. Within these frameworks, individual priorities are then made by both health care authorities and specific health care units and care providers, which creates scope for variations.

Depth: how much of benefit cost is covered?

Access to health care is to be considered a universal right for all citizens of Sweden. However, patients do not have a legal right to demand health care services. Instead, responsible principals/care providers are obliged to provide health care to all residents according to an ethical platform stating the three main principles (see Section 2.7.3 Regulation of services and goods). In other words, the politically determined allocation of funds to health care therefore sets the resource frame, and within this the care providers are guided by the ethical platform in their priorities. The system means that the priorities are thoroughly decentralized within the system, ultimately to individual doctors, which creates considerable room for variation. In practice though, patients are almost invariably provided with services and explicit prioritization rarely occurs.

There are user charges for both health care visits and prescription drugs. For outpatient visits flat rate fees are charged up to a total maximum of SEK 1 300 (EUR 117) per 12-month period, after which the care is free of charge. Children under 18 and those aged 85 and above are exempt from user charges in outpatient care. For prescription drugs, there is a special fee model where the patient's co-payment gradually increases up to a cost ceiling of SEK 2 600 (EUR 234) per 12-month period. Those under 18 are generally exempt from user charges for prescription drugs (see Section 3.4 Out-of-pocket payments). The level of cost-sharing by user charges has also decreased over time.

In tax-financed dental care within the regions, however, the level of cost-sharing is significantly higher than in other parts of the health care system, amounting to 20.9% in 2020. However, this has gradually decreased over time, from 27.6% in 2015 (SALAR, 2022b).

One area where there is considerable variation across regions is in the prescription of technical devices, such as wheelchairs and hearing aids as well as devices such as walkers and shower stools for daily living. There is evidence of particularly striking differences when it comes to user charges for prescription aids. A government investigation has therefore made the assessment that a legal regulation is required to deal with the regional differences (SOU, 2017:43).

BOX 3.1 What are the key gaps in coverage?

The Swedish health care system is ambitious in terms of both breadth and scope, as coverage is based on registered residence and all cost-effective treatments should be included in the benefit package. Important rationing mechanisms are waiting times and, for some services, OOP payments. OOP expenditures as a proportion of total expenditures on health accounted for 13% in 2020, which is low in EU comparisons. Patient fees are charged for almost all types of services and medical products. The level of private cost-sharing is higher for medicines, dental care and technical devices, which are not covered by public funding to the same extent as hospital stays and outpatient care. Hence, there are relatively few people who forgo care and treatment due to various patient fees, but it is significantly more common regarding dental care. The proportion of the population who state that they forgo care for economic reasons is also low in Sweden in international comparisons, as well as the share of households that experienced catastrophic spending. Long waiting times are reported in various patient surveys as a greater reason for forgoing care than OOPs (AHCSA, 2021c; Eurostat, 2023a).

3.3.2 *Collection*

General government budget

There are different forms of national government funding for health care. The direct funding of special health programmes and investments amounted to 2% in 2020. Also, the national government indirectly finances the regions via general or targeted grants. Altogether, national direct and indirect funding constituted 25.2% of the overall health care funding in 2020, a share that has increased from 18.4% in 2015 (Table 3.4). However, the pandemic year 2020 was extraordinary because the national government increased its contributions for the extra costs that were associated with handling the pandemic, which explains the increase in government funding by 5% that year. In particular, targeted grants increased in 2020 as the national government expressed that it would be responsible for all additional costs for the regions originating from the pandemic (Government Offices of Sweden, 2021; SALAR, 2022b). But there was already a trend towards increased national government spending before the pandemic, especially for targeted grants.

TABLE 3.4 Sources of health care financing

	2015	2019	2020
National government	**18.4%**	**20.3%**	**25.2%**
Direct	1.7%	1.7%	2.0%
Indirect	16.7%	18.5%	23.3%
General	8.3%	7.6%	9.6%
Targeted	8.4%	11.0%	13.7%
Total local taxation	**60.4%**	**59.7%**	**56.0%**
Regional taxation	42.2%	41.7%	38.7%
Municipal taxation	18.2%	18.0%	17.3%
Private (VHI and companies)	**1.1%**	**1.2%**	**1.1%**
OOP	**14.9%**	**13.7%**	**13.0%**
Other regional and municipal sources	**5.1%**	**5.2%**	**4.6%**
TOTAL	**100%**	**100%**	**100%**

Notes: OOP: out-of-pocket; VHI: voluntary health insurance.

Sources: Own calculations based on Statistics Sweden, 2022h; SALAR, 2022b.

Government revenue sources consist mainly of direct (30%) and indirect taxes on labour (27%), capital taxes (15%), Value Added Tax (22%) and various excise taxes on specific goods such as alcohol, tobacco and electricity (6%) (Government Offices of Sweden, 2020). However, there is no direct connection between the national government's expenditure on health care and various sources of income. The national government's expenditures are instead financed through the overall state budget. But each year a specified annual budget for national government spending on health care is approved by the parliament.

Collection by taxes

The largest part of health care funding consists of regional and municipal income taxation. For 2020, 38.7% of health care was financed via regional tax and 17.3% via municipal tax. Collectively, these taxes finance 56% of health care (Table 3.4).

It is the local elected political boards that decide the levels of local income taxes and as a result the level of taxation varies between different regions and municipalities. Administratively, taxes are collected from employers by the Swedish Tax Agency (*Skatteverket*). Taxation consists of proportional income taxes that are applied to the gross income from work and business activities. The average regional tax rate in 2022 was 11.56% and varied between 10.83% and 12.08% between the regions (excluding Gotland). The average tax rate has increased slightly from 11.29% in 2015.

The municipalities, have the same right as the regions to levy proportional incomes taxes on the gross income of the municipal residents in order to finance their activities. The average municipal tax rate in 2022 was 20.4% and varied between 16.9% and 23.8% between the municipalities (excluding Gotland). The average tax rate has been stable since 2015.

As both the financial and organizational responsibility for health care is decentralized to regions and municipalities, it is difficult to make precise connections between the sources of finance and different activities within local governments. Besides health care, the regions are for instance also responsible for activities such as public regional transportation, regional development and cultural activities. In 2020, about 13% of regional costs referred to areas other than health care. The same applies to the part of health care that is the financial and organizational responsibility of the municipalities, but here the connections are even harder to disentangle as the scope of municipality services is wider than for the regions. In 2020, about 80% of the municipalities' total costs related to services other than health care.

There are no earmarked taxes for health or health care services. But if the 2020 tax rate within local governments, which amounted to an average of 31.97%, were assumed to finance the proportion of expenditure within the regions and municipalities that relate to health care services, then the proportional income taxation in the municipal sector for health care would amount to 13.6%.

BOX 3.2 Is health financing fair?

As the public funding of health care is divided between national, regional and local levels as well as tax bases, it is difficult to reach an unambiguous figure on the progressiveness of funding in general and in particular regarding income taxation. On a simplified level, about 60% of health care can be said to be financed through proportional income taxation by regions and municipalities.

The progressiveness of government funding is more complex to determine. Although no part of the national government's various sources of income is earmarked for certain expenditure areas, as progressive income taxation is the main source of national government funding the government's funding of health care seems to be somewhat progressive overall.

OOP payments dominated by flat rate fees and high-cost protection schemes may generally be seen as a regressive income source. In order to determine the overall distributional effect in health care financing, a number of different sources of income need to be weighted together, and no such overall analysis currently exists. Overall, proportional income taxation (approx. 60%) is combined with progressive government funding (approx. 25%) and regressive patient fees (approx. 13%).

3.3.3 *Pooling and allocation of funds*

Allocation from collection agencies to pooling agencies

In order to adjust for structural factors, such as age structure, socioeconomic factors and geographical conditions, such as scattered populations, there is a national system of tax equalization. The purpose of this system is to provide all municipalities and regions with equal economic conditions for their activities. Through this system, the revenues of the municipalities and regions are redistributed on the basis of differences in tax base (revenue equalization) and differences in local cost conditions and needs (expenditure equalization). Grants to equalize spending needs are aimed at giving local governments the opportunity to offer an equal level of services across the country. This grant is part of the national government's general funding of health care efforts at regional and municipal levels.

The equalization system is managed by the Ministry of Finance. In 2022, the municipal equalization system distributed approximately SEK 178 billion (EUR 16.6 billion), where 15% were reallocations between regions and municipalities while the rest (85%) was paid for by the national government as a general grant (Statistics Sweden, 2022i).

In 2020, a new formula for the expenditure equalization system was introduced to take socioeconomic factors into account and additional costs as a result of sparse housing. Educational level was also introduced as a new variable because it is an important factor in comparisons of health outcomes. Compensation for differences in the incidence of HIV was removed as it is no longer an economically significant factor for the regions. The compensation for additional costs in sparsely populated areas was updated and a new component for additional costs for staffing in sparsely populated areas was introduced.

BOX 3.3 Are resources put where they are most effective?

Sweden has a long history of a weak and also divided primary care sector, the former especially in terms of general practitioner shortage. Since 2014, there have been ongoing national investigations with the mission to strengthen primary care and annual proposals have often been made with this objective. The reform ambition is to move to a system where primary care is given improved conditions to fulfil its mission. The rationale is to strengthen primary care as it is both close to the patient and can handle the complexity of disease states as well as to a greater extent meet the population's needs and expectations in terms of availability, continuity and participation. The overall efficiency and responsiveness of the health system could be increased by stronger and more effective primary care, especially with regards to care of elderly and others with multi-morbidities and chronic disease (Government Offices of Sweden & SALAR, 2022).

3.3.4 *Purchasing and purchaser–provider relations*

The Swedish health care system is integrated to a high degree. The regions are responsible for both the financing and organization of health care services, and most hospitals are owned and operated by the regions. Purchaser and purchaser–provider relations, as well as the number of private providers, therefore, differ substantially across regions in Sweden.

In the early 1990s, several regions introduced some form of internal purchaser–provider split model, whereby the traditional system of fixed annual allocations to hospitals and primary care services was, to some extent, abandoned. Instead, different forms of internal and quasi-market mechanisms were introduced, through contractual arrangements between purchasers and providers with payment based on the volume of activities produced. In some regions, hospitals were also transformed into county council-owned limited companies or in a few cases, and in terms of service provision, contracted out to private providers. Since the mid-1990s, there has been a successive return to traditional models of planning and control, especially in terms of payment models within the hospital sector, although there are still elements of a purchaser–provider split left in some regions. The public–private mix across regions in terms of primary care and outpatient specialist care providers vary greatly, but only one emergency hospital (in Stockholm) is privately managed. This also means that more market-like relations exist between regions and PCCs, whereas most hospital services are directly managed.

Part of the quasi-market mechanisms introduced in the early 1990s consisted of the hospitals' payment being based on fixed prospective per-case payments [based on diagnosis-related groups (DRGs)] on a larger scale with the aim to improve waiting times and increase hospital productivity. Between 2005 and 2015, five to seven regions still used DRGs to calculate reimbursement for hospitals within the region. However, a few years later, most of them had abandoned DRG-based reimbursement and instead returned to global/fixed budgeting – the model that dominated until the 1990s. Abandoning DRG-based payment was justified as a means of avoiding undesirable behaviours, such as upcoding and rejecting patients who were more expensive to treat. More generally, DRG-based reimbursement was seen by many professionals as a key component of debated New Public Management reforms (Glenngård & Ellergård, 2018; Anell, 2020).

The use of market mechanisms and contract-based governance have become the prevailing governance system within primary care following the 2010 primary care choice reform (see Section 2.7.2 Regulation and governance of provision and Section 2.8.2 Patient choice). A fundamental part of the reform was that payment to providers should follow the patient's choice of provider and equal conditions should apply for private and public providers. Freedom of establishment for PCCs applies to all providers fulfilling the requirements by the regions. Payment to PCCs is regulated through fulfilling such requirements, which primarily focus on minimum clinical competencies represented in the PCC. In all regions in 2022, fixed prospective payment in the form of capitation for listed patients is practised as the dominant payment form (see Section 3.6.1 Paying for health services). The number of private PCCs increased significantly during the implementation/introduction phase of the reform, but varies across regions.

In general, a private health care provider must have an agreement with a region to receive public payment. However, there are private providers (physicians and physiotherapists) who are reimbursed by the regions based on earlier national regulations and national tariffs (*nationella taxan*). This legacy from this old system operates in parallel with more recently adopted principles for payment to private providers as determined by the regions. The total expenditure for this old system was SEK 2.5 billion (EUR 233 million), in 2021, less than 0.5% of total health expenditure (SALAR, 2023b).

From 2009 onwards, a series of provider choice models have also been introduced in specialized care. As the models were initiated by individual regions, they are limited to a subset of regions (especially in Stockholm and Uppsala) as well as selected medical specialties. The introduction started in surgical specialties, such as hip, knee and cataract surgery, with reimbursement primarily by fixed prospective payments (based on DRGs). In a few cases in orthopaedic surgery, there are also episode-based payment schemes where the provider receives a package price for initial assessment, treatment and rehabilitation. Parts of the payment are then also linked to quality outcomes and responsibility for re-operation costs within 2 years after primary surgery (AHCSA, 2014b).

Since 2016, following national regulation allowing free choice of outpatient services nationally (see 2.8.2 Patient choice), a number of private digital providers have also been established, who offer primary care via chat and video consultations based on their own digital platforms. These care

providers have operated "outside" the ordinary accreditation-like conditions in primary care, but they have still received public funding, by invoicing the patients' home regions via the National Agreement for out-of-county care between Sweden's regions (Blixt & Jeansson, 2018). This new digital care provision has been possible because of the combination of a number of regulations, including the Patient Act (patients are free to choose outpatient care anywhere in Sweden), the patient choice system in primary care, and the regions agreement to finance cross-regional care through a common fee-for-service (FFS) scheme (see Section 3.6.1 Paying for health services).

The national government has sought to regulate the digital health care providers with the ambition of integrating them with the traditional PCCs. The regions, on their side, have stimulated existing PCCs to increase their own supply of digital services and to sign their own agreements with the digital health care providers and so increase their opportunities to govern and participate in the market. Since 2018, public providers have adopted these forms of on-line consultations at the same time as the private providers have, increasingly, started to offer physical consultations.

3.4 Out-of-pocket payments

Private expenditures as a proportion of total expenditures on health accounted for about 14.1% in 2020, where 92.5% were OOP payments (Table 3.1), which corresponds to 13% of health care expenditure. The proportion financed via OOPs has decreased over the last 10 years, from 14.5% in 2011 to a peak of 14.9% in 2013. One explanation is that co-payments have been nominally constant during certain periods, and thereby decreased as a proportion due to the general cost increase within health care.

3.4.1 *Cost sharing (user charges)*

For physical visits and treatments within outpatient care, patients pay flat-rate fees up to a maximum ceiling of SEK 1 300 (EUR 117) per 12-month period, after which visits are free of charge (Table 3.5). The regions determine the fees, so they vary across the country. In primary care, the fees vary between SEK 100 and SEK 300 (EUR 9–28) per visit and in specialized outpatient

care between SEK 200 and SEK 400 (EUR 19–37). Since 2017, those aged 85 and above are exempt from user charges. Children under 18 are also exempt from outpatient fees, including primary care, in all regions and a majority of regions apply this up to the age of 20 (SALAR, 2022c).

Maternity care visits are free of charge during pregnancy. According to a specific act on exemption from fees for certain screening within the health care system (*Lag* (2016:659) *om avgiftsfrihet för viss screening inom hälso- och sjukvården*), the same also applies to screening for breast cancer with mammography from July 2016 and screening for cervical cancer from 2018.

There is no maximum cap on user charges for inpatient care, but patients pay only around SEK 120 (EUR 11) per day. The fees are set by the regions and vary marginally. There are instead greater differences in fee reductions as a result of income, age, illness and activity compensation and the number of days spent in hospital. Some 14 regions apply various forms of reduced fees, where the most common is that patients under 40 years with full activity/sickness compensation pay half the daily fee for the first 30 days of care.

In 2021, prescription drugs within the Drug Benefit Scheme made up approximately 65% of the total pharmaceutical market and had a turnover of SEK 34.9 billion (EUR 3.2 billion). Of this, co-payments accounted for just under SEK 6.2 billion (EUR 578 million). For prescribed drugs within the Drug Benefit Scheme, there is also a high-cost protection scheme where the patient pays full price for medicines up to SEK 1 300 (EUR 117). Then the level of co-payment decreases according to the following cost intervals:

- 50% co-payment between SEK 1 300 and SEK 2 481 (between EUR 117 and EUR 225)
- 25% co-payment between SEK 2 482 and SEK 4 610 (between EUR 226 and EUR 419)
- 10% co-payment between SEK 4 611 and SEK 6 381 (between EUR 420 and EUR 580).

The maximum cost of prescription drugs included in the high-cost protection scheme is SEK 2 600 (EUR 234) over a 12-month period from the first prescription, but those under 18 are exempt from charges. Pharmacies are also obliged to offer patients the lowest price medicine when there are equivalent alternatives.

There is also a high-cost protection scheme for dental care such that the government covers part of the cost according to the reference price list above SEK 3 000 (EUR 279). Then the level of co-payment decreases according to the following cost interval:

- 50% co-payment between SEK 3 000 (EUR 279) and SEK 14 999 (EUR 1 395) according to the reference price
- 85% co-payment above SEK 15 000 (EUR 1 395) according to the reference price list.

If the dentist charges a higher price than the reference price for any measure included in the treatment, patients are not covered for the excess part. The high-cost protection is based on measures during a period of 12 months. Patients can decide when a new compensation period should start before the previous period has expired, which can be advantageous if they are facing a major treatment. There is also a government dental care voucher that may be used to reduce costs up to SEK 3 000 (EUR 279). This should encourage adults to regularly visit the dentist for examination and preventive care. The contribution is SEK 300 or SEK 600 (EUR 28 or EUR 56) per year, depending on age.

There is no national regulation or uniform payment scheme within the area of prescription medical devices, but this is instead handled by different regulations within regions and municipalities. There are therefore variations in the provision of aids by health care providers, in users' co-payments as well as opportunities for co-financing and freedom of choice (AHCSA, 2020b) posing potential challenges with unequal access to aids between users.

Within elderly care, there is a high-cost protection scheme in the form of a cap on user charges for home care and long-term institutional care. The maximum fee is SEK 2 170 (EUR 203) per month for 2022. The municipality must also ensure that service users within elderly care have enough income left over for their basic needs after the fees.

TABLE 3.5 User charges for health services

HEALTH SERVICE	TYPE OF USER CHARGE IN PLACE	EXEMPTIONS AND/OR REDUCED RATES	CAP ON SPENDING
Primary care	Co-payment determined by each region, between SEK 100 (€ 9) and SEK 300 (€ 28)	>85 years old exempt by law, <20 years old exempt in most regions	Maximum OOP payment of SEK 1 300 (€ 117) for all health care visits within a 12-month period
Outpatient specialist visit	Co-payment determined by each region, between SEK 200 (€ 19) and SEK 400 (€ 37)	>85 years old exempt by law, <20 years old exempt in most regions	–
Outpatient prescription drugs	Patient pays full cost up to SEK 1 300 (€ 117), then decreasing co-payment levels, uniform throughout country	<18 years old exempt by law, <21 years old exempt for contraceptive	Maximum co-payment is SEK 2 600 (€ 234) for 12-month period
Inpatient stay	Co-payment determined by each region, approximately SEK 120 (€ 11) per day	<18 years old exempt in all regions, <20 years old exempt in most regions	Reductions: Vary across regions. Fees reduced depending on income, disability, age or length of stay in 14 regions
Dental care	Patient pays up to SEK 3 000 (€ 279) then partial subsidy	<24 years old exempt by law	Decreasing co-payment levels as subsidy increases, but no cap
Technical aids/ medical devices	No national regulation – instead regional variation	–	–

Notes: OOP: out-of-pocket; SEK: Swedish kronor.

Source: Authors' own compilation.

3.4.2 *Direct payments*

Free pricing applies to prescription drugs outside the Drug Benefits Scheme and these costs are not included in the high-cost protection scheme. Medicines outside the benefits package made up approximately 5% of the total market in 2021. However, almost half of the cost consisted of anti-infection drugs, which are the financial liability of the regions. For medicines that are not financed by the regions, the patient pays the full cost.

Non-prescription medicines sold in pharmacies and in retail establishments are fully financed by the patient. These drugs make up almost 9% of the total market.

3.4.3 *Informal payments*

Informal payments in parallel with traditional OOP payments have historically been mostly absent in the Swedish health care system. However, in the 2022 Eurobarometer, 1% of the population reported that, in addition to the official fees, they had to pay or give something extra to the providers. The corresponding figure for the EU27 was 4%. In contrast, the 2019 Eurobarometer showed that this form of informal payment did not occur in Sweden (European Commission, 2022).

3.5 **Voluntary health insurance**

Almost 660 000 Swedes had VHI in 2018. This is six times more than in 2000 and corresponds to approximately one in seven employed persons aged 16 to 64 years. Although private health insurance is becoming more common, it still accounted for just 0.6% of the total health care costs in 2019 (Insurance Sweden, 2020; Statistics Sweden, 2022h).

In Sweden, VHI is taken out either as individual insurance or as a group policy, for example through the employer or a trade union. About 90% were group policies in 2018, and of those, about two thirds were taken out by the employer. Furthermore, VHI is more common in metropolitan regions and in the construction industry and financial sector. In order to be able to take out health insurance, certain requirements are set by the insurer, most commonly a health declaration or a health check is required or, in the case of employer-paid insurance, that the person is able to work full-time.

VHI includes preventive measures, planned specialist care and rehabilitation, but emergency care is not offered by any company. The health care services offered are mainly complementary to those within the publicly financed health care system, but they also contain guarantees from the insurance companies about quicker access to care. In the provision of services, the insurance companies cooperate with private health care providers, who in turn may have parallel agreements with several insurance companies as well as with several regions. These parallel agreements and the possibility that private providers give priority to patients with VHI over patients funded by regions, have initiated a debate about whether priorities follow the needs-based principle.

It is difficult to assess how VHI affects overall health care capacity and what effect it has had on patients in publicly funded care. On the positive side it has been argued that VHI will off-load the public system and hereby free capacity within the public system. However, there is evidence that providers who receive both private and public funding do not always comply with the waiting time guarantees and other time limits stipulated in contracts with the region for the publicly funded patients. This makes it more difficult to assume that there would be free capacity to treat VHI patients without negative side-effects for publicly funded patients within some of these providers (AHCSA, 2020c).

The demand for VHI may be explained by the long waiting times for publicly funded health care, that certain treatments are not offered in the public sector, or that the care is not sufficiently person-centred (AHCSA, 2020c). However, a central part in the Swedish health care legislation is that care must be provided on equal terms and on the basis of need, and not for example by age and the ability to work. It is unlikely that people with VHI, who on average receive care faster than in publicly funded care, on average have greater medical needs (AHCSA, 2020c). Since July 2018, employer-paid VHI is a taxable benefit for employees. The former Social Democratic led government also appointed an independent investigation (SOU, 2021:80) with the task of regulating the private market for health care insurance and preventing private health care providers from giving patients with VHI priority to care.

3.6 **Payment mechanisms**

3.6.1 *Paying for health services*

The 21 regions decide individually how to pay providers for health services. The exceptions are reimbursement for prescription drugs decided by TLV and a small share of private providers (physicians and physiotherapists) operating under a specific national tariff regulated in the Medical Reimbursement Act. In outpatient care, the Patient Act also gives patients freedom to seek care outside their home region. The regions therefore have collective agreements that regulate cross-regional compensation in these cases.

Within primary care, risk-adjusted capitation for listed patients is the main form of payment mechanism in all regions (Table 3.6). The proportion of capitation varies from around 60% in Stockholm (2020) to almost 100% in Halland and Värmland. The capitation formula is weighted/risk-adjusted in order to capture differences in expected care needs. Essentially, four components are used in the weighting including age-structure of the listed population (some regions also include gender), a measure of overall illness of the listed population (ACG), social deprivation in the area of the PCC (CNI) and geographic location of the PCC. [ACG is a measure of overall illness that quantifies morbidity by grouping individuals based on their age, gender and the constellation of diagnoses over a defined time period (Reid et al., 2002) and CNI is a measure of social deprivation related to seven factors: 65+ and living alone, born abroad (Eastern Europe, Asia, Africa and South America), unemployed 16–64, single parent with children <17, person 1 year or older who moved into the area, low-educated 25–64 and age younger than 5 years (Sundquist et al., 2003).] However, the factors and weights vary between regions. In some regions, capitation is also adjusted for local geographical conditions, for example density of population, distance to nearest hospital and whether the PCC is located on an island. In several regions capitation is adjusted for the proportion of outpatient visits not related to primary care. Besides capitation, payment to PCCs consists of:

- FFS reimbursement for visits or process measures
- pay-for-performance (P4P) schemes based on indicators that should reflect availability and process quality
- cost responsibility for listed patients' primary care consumption at other primary care providers.

These additional parts of reimbursement have gradually decreased over time in all regions, especially regarding the FFS component (Lindgren, 2019).

Box 3.4 What are the effects of altered payment schemes in primary care?

The introduction of a national choice reform in primary care in 2010 where reimbursement follows the patient's choice of provider together with continued regional responsibility for the payment scheme has led to significant variation in the design of models, both between regions and over time. A mix of different payment forms, including capitation (with varying degrees of risk adjustment), FFS, P4P elements and cost responsibility for the listed population's other health care consumption, have been integral components of most models. Over time, however, a common development is seen where the proportion of capitation has increased at the expense of FFS and P4P elements and that the capitation part has been weighted to a greater extent to better take into account the patients' expected care needs via indicators of morbidity (ACG) and especially social deprivation (CNI). The stated background and arguments to support this development concerns that models with greater elements of FFS and only age-adjusted capitation risk stimulating short visits for new health problems at the expense of, among other things, the chronically ill, and that the equality of care, in terms of the distribution of care consumption between different socioeconomic groups becomes unfavourable.

A number of scientific studies have studied how these changes in the payment models affected efficiency and equality. The socioeconomic distributional effects of a higher proportion of FFS seem uncertain, as some studies indicate that the care-volume increases have accrued to individuals with lower incomes (Sveréus, Kjellsson & Rehnberg, 2018), but at the same time they also had a negative impact on the location of health centres from a socioeconomic perspective (Riksrevisionen, 2014). However, an increased share of CNI-based capitation, which was introduced to increase resources in socially deprived areas, has not been found to affect the volume of visits, either in total or in terms of distribution (Anell, Ellegård & Dackehag, 2021), but instead led to increased establishment in areas with high CNI compensation, and that private health centres have been quicker to adapt to the new incentives (Anell, Dackehag & Dietrichson, 2018). The effect of ACG has been studied to a lesser extent, and is used less frequently by regions, but studies point to the risk of upcoding diagnoses in areas with high competition. Several studies have also analysed the effects of P4P-based compensation (Ellegård, Dietrichson & Anell, 2018; Ellegård, 2020). They show that P4P can have a positive effect on process measures and simple changes that individual health care providers can achieve themselves (for example, better adherence to guidelines, registration in quality registers, implementation of drug reviews) while unintended effects can occur. However, the long-term consequences and effects on costs and health are uncertain.

Since 2016, digital consultations have emerged not only within primary care, but also in outpatient care in general. The background is the Patient Act's deregulation of care provision, which made it possible to seek outpatient care throughout Sweden. A number of private actors therefore made agreements with already established PCCs to offer digital consultations within the provider choice system. The location-independent digital matching of supply and demand then enabled patients from all over the country to have digital consultations that were reimbursed by their home region. The digital consultations were initially fully reimbursed via a prospective fixed price/FFS arrangement according to an inter-regional price list. Over time, this meant that a new parallel digital health care supply was introduced across the country, even though the digital health care providers only had agreements within certain regions. The initial inter-regional compensation for a digital doctor's consultation amounted to SEK 2 000 (EUR 186) per consultation (the same as for a physical consultation) but have since been gradually reduced to SEK 500 (EUR 47) in 2022.

Within specialized somatic care, global budgeting has traditionally been the basis for provider payment. This is also the most common form of payment for publicly owned hospitals or specialist clinics. Eight regions use only this form of payment whereas the other 13 regions supplement with other forms of payment. The Region Östergötland is unique in that it uses capitation payment for part of specialist care. DRG-based payment is only used selectively, and its role as a payment mechanism has decreased within hospital care in several regions. However, in Region Stockholm the hospitals' payment from 2021 has been again partly based on DRG. In comparison with primary care, P4P-related payment is less common in specialized care. Only four regions indicated that this was in use in 2019 (Lindgren, 2019).

Parts of the specialized care sector are also exposed to competition through the introduction of regional-based provider choice systems. Other specialized care is instead procured in competitive tendering (using the Public Procurement Act as legal framework, see Section 2.7.2 Regulation and governance of provision) as a complement to the region's own provision. When care is procured, or subject to competition within a provider choice system, more flexible payment systems are needed, which consider volumes, process measures or even medical results. DRG is therefore more often used as a basis for procured activities. More flexible and DRG-based payments are also more frequently used to regulate compensation between the regions

for care in other regions; for example, when patients receive care in a region other than where they reside (SALAR, 2022d).

In an attempt to address the challenges of prospective DRG-based payment for single procedures, some efforts have been made to introduce episode-based payment for a broader range of services in a care episode. A prospective price is then paid for the entire episode, regardless of the exact content of care. This form of episode-based payment is used within certain, most often orthopaedic, provider choice systems in four regions. The episode-based payment may also be adjusted for differences in case-mix and include a complication guarantee where the care provider is made financially responsible for complications that may arise during and after the treatment. A performance-based component may also be linked to the remuneration.

TABLE 3.6 Provider payment mechanisms

PROVIDERS/PAYERS	REGIONS	COST-SHARING
Primary care centres	C >90%, FFS 5–10%, P4P	2%
Digital providers in primary care	FFS 100%	n/a
Providers on national tariff	FFS 100%	n/a
Hospital inpatient	Global budgets, P4P	1%
Hospital outpatient	Global budgets, FFS, case based	1%
Dentist	FFS	21%*

Notes: C: capitation; FFS: fee-for-service, case-base, for example, diagnosis-related groups or episode-based payment; n/a: not available; P4P: pay-for-performance.
* Rate of fee financing in the regions' tax-financed activities 2021.

Source: Authors' own compilation.

3.6.2 *Paying health workers*

Most health workers including physicians across both public and private providers and independent of service sector (hospitals, PCCs, nursing homes and home care services) are salaried employees. The majority of Swedish health care personnel are members of a professional union that represents them in salary negotiations. The Swedish Association of Health Professionals (*Vårdförbundet*) is the trade union and professional organization representing about 114 000 registered nurses, midwives, biomedical scientists and radiographers. The Swedish Medical Association (*Sveriges läkarförbund*) is the union and professional organization representing physicians. More than 80% (approximately 56 000) of Sweden's doctors were members of the organization in 2022. The SALAR works as the employers' central association for negotiating the framework for local wage bargaining and terms of employment for the personnel employed by the regions and municipalities (see Section 2.2. Organization).

A full week's work is 40 hours. In 2020, the average monthly gross salaries for staff employed by the regions were SEK 85 000 (EUR 7 905) for specialist physicians, SEK 51 800 (EUR 4 817) for dentists and about SEK 36 700 (EUR 3 413) for nurses. This includes compensation for work during non-regular working hours (Statistics Sweden, 2022j). No major differences exist in salary levels between physicians working as general practitioners (GPs) in primary care or specialist physicians working in hospitals.

4

Physical and human resources

Chapter Summary

- Sweden has the lowest number of hospital beds per inhabitant in the EU. While the low number to some extent may depend on institutional factors, such as a comparatively comprehensive provision of care in ordinary and special housing for elderly people and people with functional impairments, there are also indications of over-allocated beds, suggesting that the number of hospital beds is insufficient.

- There are 66 emergency hospitals in Sweden (*including seven university hospitals*). Almost all 21 regions are involved in substantial investment efforts to renovate or replace hospitals.

- The regions have a large responsibility when it comes to planning physical and human resources. The lack of national planning may cause unwanted variations across the country and inefficiencies, such as an inadequate supply of certain specialities, for example, GPs.

- The number of physicians and nurses relative to the population is comparatively high. Despite the increased numbers of physicians, there are labour shortages for some medical specialists (for example, GPs). The regions also have challenges in recruiting and retaining specialist nurses, and the number of registered nurses per capita has declined since 2015.

- Sweden has a high usage of e-health, but the lack of nationally coordinated digital infrastructure combined with restrictive legislation leads to inefficiencies and difficulties when exchanging patient information between care providers.

4.1 Physical resources

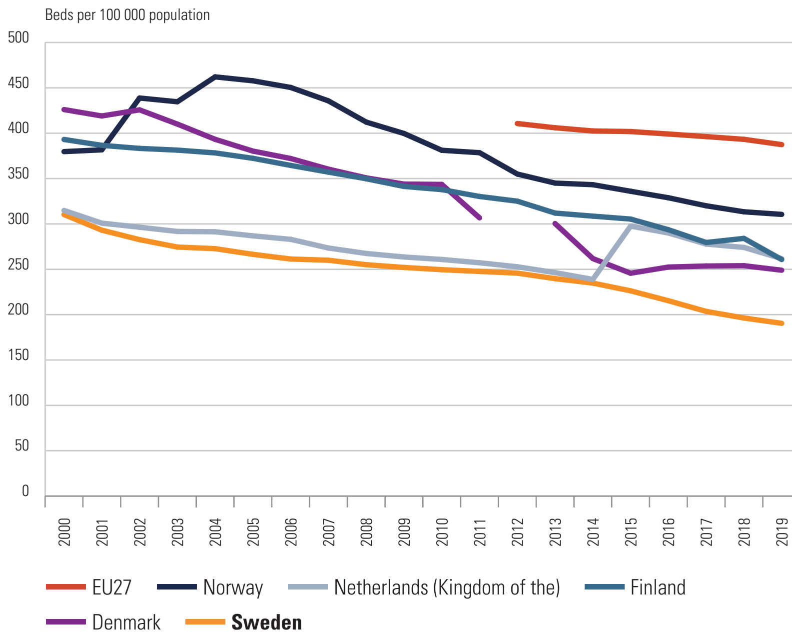
4.1.1 *Infrastructure, capital stock and investments*

Infrastructure

In 2019 there were approximately 190 hospital beds per 100 000 inhabitants in Sweden. The number of hospital beds per inhabitant is lower in Sweden compared with all other EU countries (see Fig. 4.1). Municipal health care in ordinary and special housing for elderly people may, to some extent, account for the difference (see Section 2.2. Organization).

From a historical perspective, there has been a continuous decrease in the number of hospital beds since the 1970s. This declining trend is similar to the EU average, which reflects a common trend in shifting inpatient care towards outpatient and primary care. This trend is supported by a parallel trend in Sweden towards provision of care in ordinary and special housing, supported by both regional and municipal health care staff. The rate of decrease in hospital beds since 2000 (Fig. 4.1) has been slower than in the 1990s, when the decrease was reinforced by municipalities taking over responsibility for long-term care (the ÄDEL-reform) in parallel with a financial crisis that initiated cost-cutting in the public sector, including hospitals (see Section 2.1. Historical background). Several measures suggest that the number of hospital beds is insufficient. For instance, the number of over-allocated beds (that is, when a patient receives inpatient care, which does not fulfil the requirements) and the number of patients transferred to other hospitals because of limited bed capacity have increased gradually since 2014 (NBHW, 2020a).

FIG. 4.1 Beds in acute hospitals per 100 000 population in Sweden and selected countries, 2000 to 2019



Note: EU27: European Union 27 Member States as of 2020.

Source: Eurostat, 2022d.

Current capital stock

In 2022, there were 66 emergency hospitals in Sweden, including seven university hospitals. There are also a number of specialist care centres located outside hospitals. Almost all publicly funded hospitals are under regional management, with a few exceptions of privately managed hospitals operating with public funding from the regions. Among the specialist clinics, private ownership is more common. Most hospitals were built between 1950 and 1980, and there are currently investment efforts to renovate or replace hospitals in almost all regions. These investments in the hospital sector are managed by the regions independently.

BOX 4.1 Are health facilities appropriately distributed?

In 2022, there were 1 100–1 200 PCCs (see Section 5.3 Primary care). Although most PCCs are located in densely populated and metropolitan municipalities, there are more PCCs per 100 000 inhabitants in rural municipalities (AHCSA, 2021d). Even though the number of PCCs is higher in rural municipalities, the average distance to travel is longer, because large parts of Sweden are sparsely populated.

Even though there are hospitals in each region, and at least one university hospital within each of the six larger collaborative health care regions, there are significant differences in average travel times to a hospital across regions. For instance, in the three largest regions of Stockholm, Skåne and Västra Götaland, almost no inhabitants have a travel time to a hospital exceeding 45 minutes. In the more sparsely populated regions, between 15% and 36% of the inhabitants have a travel time that exceeds 45 minutes (AHCSA, 2018b).

Inhabitants in metropolitan municipalities visit primary care more often than inhabitants of more rural municipalities. In contrast, inhabitants in more rural municipalities consume more inpatient care than inhabitants in metropolitan municipalities.

Regulation of capital investment

The regions plan and fund capital investments and decisions should be based on the health care needs in the region. The national government currently does not have an active role in the investment process and there is no national strategy or structure for designing and investing in care buildings. In 2021, a government committee (SOU, 2021:71) suggested stronger national involvement in infrastructure investments. The suggested changes were to define "national interests" that should guide regional and municipal decisions on infrastructure investment, to develop common definitions and standards for health care buildings and to transfer ownership of health care buildings from regions to the government. However, these suggestions were negatively received by the regions and SALAR and have not yet been realized.

Swedish health care legislation states that wherever health care is conducted, there must be qualified staff and equipped facilities to ensure health care of good quality. For health care that requires hospitalization, hospital care must be provided. The law or national guidelines do not, however, state what characterizes a hospital, how decisions about creating new hospitals, or

changing or closing existing hospitals, should be made nor what is required in terms of population per hospital or other resource criteria.

In general, the planning process for physical care buildings is a collaboration by voluntary networks consisting of regions, authorities, architects and representatives of research. In some cases, cooperation within the six collaborative health care regions involves joint planning on what the overall health care system should look like within the region and to some extent, what priorities should be made. Cooperation within the six collaborative health care regions is not stipulated by law, but is up to the regions themselves. Each region independently decides on investments in individual hospitals. In certain areas, however, regions are required to cooperate, for example, regarding highly specialized national care, where a licence for service production is required from the Swedish National Board for Health and Welfare (see Section 5.4 Specialized Care).

The hospital stock that is currently being replaced or renovated was largely built during the 1960s and 1970s and the technical life span as well as changes in demography and medical technology have led to a need for substantial investments. The level of investment in buildings and facilities for health and medical care is at a historically high level, with 18 of 21 regions having made major investments since 2016. The total sum of investments in ongoing and planned investment projects (in 2021) for the regions' emergency hospitals amounts to just over SEK 100 billion (EUR 9.4 billion) (about half of investments concern university hospitals) (SOU, 2021:71). The majority of investments in buildings are targeted at specialized somatic care (71%) and specialized psychiatric care (24%), whereas primary care investment and other investment stand at 3% and 2% of investment, respectively.

In general, national reforms or stated policy priorities do not affect investment decisions in for example real estate, and investment projects in the health care sector have many dimensions including research and education, contingency aspects, economic efficiency and skills supply. In 2021, an inquiry (SOU, 2021:71) stated that there was a lack of national monitoring of which investments are made, what they are intended for, and how they contribute to achieving the goals for health and medical care.

Investment funding

The regions' most dominant sources of income to fund investment in hospitals and other care facilities, as well as in medical technology and other equipment, are tax revenues and government grants. Investment in relation to incomes from taxes and national grants are larger in the most populated regions. Increased investment due to an aged property stock that needs to be replaced and adapted to today's medical and work environment requirements have increased the level of regional loan debt. However, the debt is unevenly distributed between the regions; Region Stockholm's share of the total loan debt across the 21 regions in 2020 was 70%. Some 14 regions are members of the credit institute *Kommuninvest,* a financial cooperation between regions and municipalities, that finances a large part of investments by regions and municipalities. Regions without membership in *Kommuninvest* instead received most of their financing through borrowing directly via the capital market. Additionally, *Fastighetsrådet* is a research and development fund administered by SALAR where all regions contribute to finance joint projects for health and medical care.

The total extent of public–private partnerships is not known in Sweden (SOU, 2020:15). There is one large example within the health care sector, New Karolinska Solna [*Nya Karolinska Solna* (NKS)], a university hospital in the Stockholm region that re-opened in 2018. The decision to outsource the financing, construction and property management of NKS via public–private partnerships has been criticized and debated. Studies have suggested that this particular public–private partnerships should have been avoided because the region had the possibility to obtain loans if needed and as there was little competition in terms of the number of possible providers (Junker & Yngfalk, 2019).

4.1.2 *Medical equipment*

Medical equipment is financed by the regions. Sweden had 283 computed tomography (CT) scanners and 184 magnetic resonance imaging (MRI) units per 1 000 population in hospitals in 2020 (excluding CTs and MRIs in outpatient clinics) (Table 4.1). The number of CT scanners is higher than in Finland, the Kingdom of the Netherlands, Germany and France, but lower

than in Denmark. The number of MRIs is higher than in Germany, France and the Kingdom of the Netherlands, but lower than in Finland.

TABLE 4.1 Items of functioning diagnostic imaging technologies in hospitals (MRI units, CT scanners) per 1 000 population in Sweden, 2020

	SWEDEN	LOWEST AND HIGHEST IN EU (RANGE)
CT scanners	283	110 (Romania) – 403 (Denmark)
MRI units	184	38 (Slovakia) – 306 (Finland)

Notes: CT: computed tomography; MRI: magnetic resonance imaging.

Source: Eurostat, 2022e.

4.1.3 *Information technology and eHealth*

The Swedish government together with SALAR has formulated a common "vision" for e-health in Sweden – *Vision e-hälsa* 2025. The vision is that in 2025, Sweden shall be the best in the world at using digitalization and e-health for equal health and welfare and for patient and citizen empowerment.

The strategy to achieve this vision consists of four goals (the individual as a co-creator, the right information and knowledge, safe and secure information processing, and development and digital transformation hand in hand) and three fundamental conditions (regulations, standards and a more consistent use of terms) (e-hälsa 2025, 2022). The vision is monitored by indicators such as the Digital Economy and Society Index, the share of health data registers that can be shared with national and international actors and providers. There are also indicators measuring the population's attitudes to and use of digital services in health care and welfare services, information security and to what extent information is shareable between providers.

Patients

Digital health care visits, access to medical records, electronic booking systems and renewal of prescriptions are examples of digital services for patients. The use of digital services increased sharply during the COVID-19 pandemic. In a population survey in 2021, the majority of respondents reported that they

had used the Internet or a digital service to access information about diseases or treatment (74% compared with 61% in 2019) and those who had a video meeting almost doubled (15% compared with 8% in 2019). The Internet is also used to schedule, re-schedule or cancel a health care visit (58%), communicate with text messages with health care staff (33%) and compare providers (14%) (Swedish eHealth Agency, 2022a).

Internet access is higher in Sweden than in several other EU countries (95% of the population use the Internet daily, and only 2% have never used it, which can be compared with the EU averages of 85% and 9%, respectively) (European Commission, 2020). The vast majority of the population has an e-identification. Coverage varies with age with a lower coverage in the older age groups, which shows the same pattern for attitudes towards digital services. While the majority of the population feels positively about using e-services (for example, medical records, renewals of prescriptions and electronic booking), older age groups are more negative. Some 47% of the population is positive towards digital health care (Swedish eHealth Agency, 2022a).

In health care

Sweden was an early adopter in introducing information technology (IT) systems into the health care sector. In 2022, documentation in almost all areas of health care was digitalized. Generally, medical records, prescriptions, laboratory test orders and results are handled electronically and there is a wide array of e-health services directed to patients. Moreover, the number of care providers who offer digital consultations with patients continues to rise, especially during the COVID-19 pandemic. Providers that only offer digital consultations have been present in primary care since 2016, but since then many physical primary care providers have also begun to offer digital consultations.

Several challenges related to the implementation of digital technology can be identified. For instance, medical records systems are seldom integrated and compatible with each other, and data in national health care registers must often be entered manually from patient records. In addition, a large share of the information contained in patient records is entered as free text, and without a common terminology or standard. Many of the IT systems in use, including electronic systems for medical records, are also perceived by health care workers as outdated when it comes to usability (AHCSA, 2016). On the other hand, several regions also report problems when updating and changing these systems. Some of the more advanced systems require storage of data

outside the EU, which causes legal problems. In addition, digital systems are not adapted to Swedish medical practices, and require investments in time for learning, adaptation and to ensure patient safety.

The lack of interoperability between systems is another challenge frequently referred to. Regions and municipalities make their own decisions on which systems to use. In some regions, public and private health care providers use the same system, whereas in other regions different systems are used (Swedish eHealth Agency, 2022a). The systems used also differ between regions. The use of separate systems complicates the access to medical records across care providers. On a more basic level, there is also a need for a more uniform use of classifications and terminology for effective compilation of information.

To facilitate the sharing of information on patients, a national tool, NPÖ (the national patient overview – *nationell patientöversikt*), has been developed. NPÖ makes it possible for publicly financed care providers to share information from patient records from other care providers (Swedish eHealth Agency, 2022b). So far, the information shared through NPÖ is incomplete because not all health care providers are connected.

4.2 Human resources

4.2.1 *Planning and registration of human resources*

Mechanisms for planning human resources

There is no national planning for the number of education places, and universities and colleges in Sweden have autonomy in deciding the internal distribution of resources, the number of admitted students and education content. In the case of medical schools, the government has had some influence as it financially compensates regions for their contribution of offering medical students workplace training in clinics, for example. The total budget for this regional contribution hence puts a cap on the number of medical students (SOU, 2013:15).

The distribution of physicians across specialist competences depends on the number of specialist training positions in each specialty. The number of places is determined by the regions in negotiation with hospitals and other

providers that are able to offer training positions and supervisors. These decisions within each region ultimately also determine the distribution of specialists at the national level.

In 2020, the government established an advisory body intended to support the planning of human resources in the health care sector, the National Health Competence Council (*Nationella vårdkompetensrådet*). The mission of the Council is to assess the skill requirements and to support and promote collaboration regarding supply at national and regional levels. It includes representatives of regions, municipalities, academic institutions, NBHW and the Swedish Higher Education Authority.

System of registering and licensing health professionals

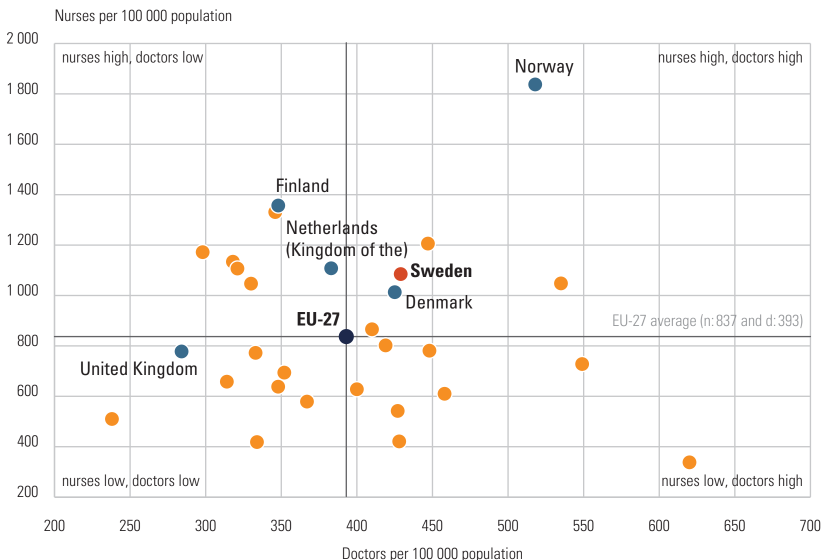
After completing the relevant study and training programmes, physicians, registered nurses, dentists, pharmacists and other licensed health service staff can apply for a licence to practise their professions from NBHW. There are also professions that do not require a licence, for example pharmaceutical technicians, dental technicians, dental nurses and assistant nurses. Once licences are granted, they are valid indefinitely. Health care workers educated outside Sweden but within the EU/EEA can receive a licence by meeting the requirements of the relevant articles of EU directives on the recognition of professional qualifications. They must also show that they are not prohibited from pursuing the profession, such as through a Certificate of Good Standing or Certificate of Current Professional Status, and an approved grade or certificate in the Swedish language from either a municipal upper secondary adult education programme, Swedish at Level C1 in accordance with the Common European Framework of Reference for Languages, or a course or examination that satisfies the entry requirements for higher education studies.

Physicians educated outside the EU/EEA and without at least 3 years of practising within their branch within EU/EEA can receive a Swedish licence in two ways. Regardless of the path selected, they are required to be fluent in Swedish, Norwegian or Danish to be eligible for a licence. The first way is to apply through NBHW. The process entails several steps – validation of previous education, taking a test of their medical knowledge, taking a course in Swedish legislation and undertaking an internship before applying for a licence. The second way is to take an additional training course at a college or university and undertake an internship in Sweden before applying for a licence.

4.2.2 *Trends in the health workforce*

Although the numbers of physicians, midwives, psychologists, dietitians, audiologists, speech therapists, pharmacists and radiology nurses per capita have increased in Sweden, the number of psychotherapists, dentists, dental hygienists, registered nurses and physiotherapists per capita shows a declining trend in more recent years. In comparison with other countries, Sweden has a comparatively high number of practising physicians and registered nurses per 100 000 inhabitants (see Fig. 4.2). Sweden is lower than Norway, but higher than Denmark and the United Kingdom. Finland and the Kingdom of the Netherlands have more registered nurses than Sweden, but fewer doctors per 100 000 inhabitants.

FIG. 4.2 Practising nurses and physicians per 100 000 population, 2020 or latest available year



Note: EU: European Union.

Source: Eurostat, 2022f.

In 2022, most regions were experiencing difficulties when recruiting and retaining staff such as specialist physicians, specialist nurses, midwives, psychologists and radiology nurses. About half of the regions experience a similar shortage of dentist and physiotherapists. The labour market situation for psychotherapists, pharmacists, audiologists and dietitians is reported to be more balanced.

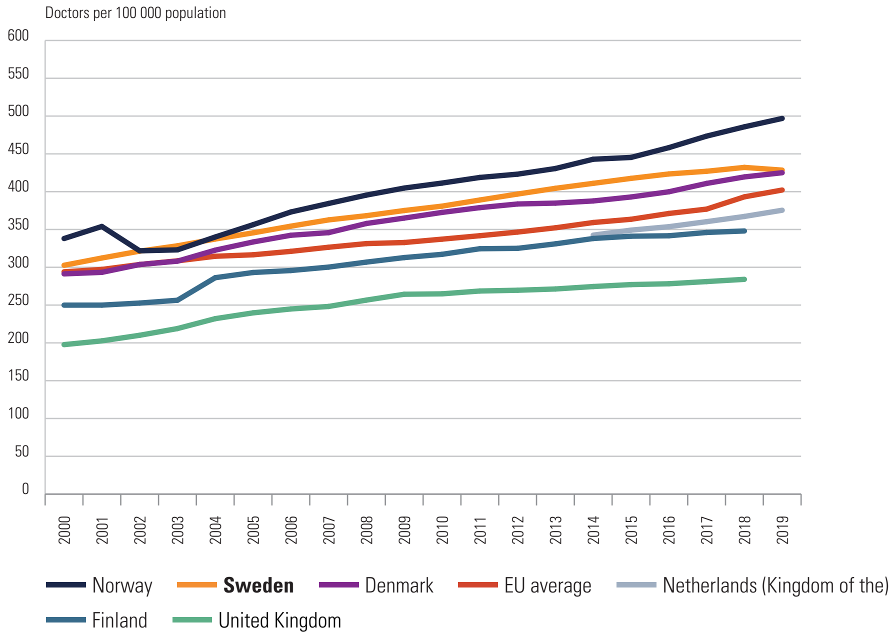
The shortage of, in particular, specialist nurses and GPs is subject to debate. For instance, labour unions organizing registered nurses, midwives or physicians claim that difficulties when recruiting and retaining staff are caused by an inadequate working environment including a stressful working environment. Shortages are also often claimed to cause problems such as lack of hospital beds and long waiting times and to prevent necessary changes in the health care system to the favour of primary care. Difficulties in recruiting staff also lead to a dependence on agency staff, particularly in primary care. In addition to filling vacancies, agency staff are also used to cover peaks in demand, such as during the holiday season. Although regions are working on reducing their dependency on agency staff to cut costs and increasing continuity and quality, problems persist.

Physicians

Between 2000 and 2019 there has been a continuous increase in the number of practising physicians from about 300 physicians per 100 000 inhabitants in 2000 to about 430 per 100 000 inhabitants in 2019 (Fig. 4.3.). This corresponds to a 48% increase. This increase is similar to developments in other EU and northern countries.

Despite the increase in the number of physicians, several regions report a shortage, particularly of GPs. The number of inhabitants per GP is much higher than the currently recommended 1 100 inhabitants per GP, and the number of vacancies is high. The share of physicians with a GP specialty is also lower in Sweden than in comparable countries, such as Denmark and the Kingdom of the Netherlands, an indication of the historical focus on developments in hospitals. The magnitude of shortages for other specialties is considered to be more difficult to assess (AHCSA, 2022a).

FIG. 4.3 Number of physicians per 100 000 population in Sweden and selected countries, 2000 to 2019



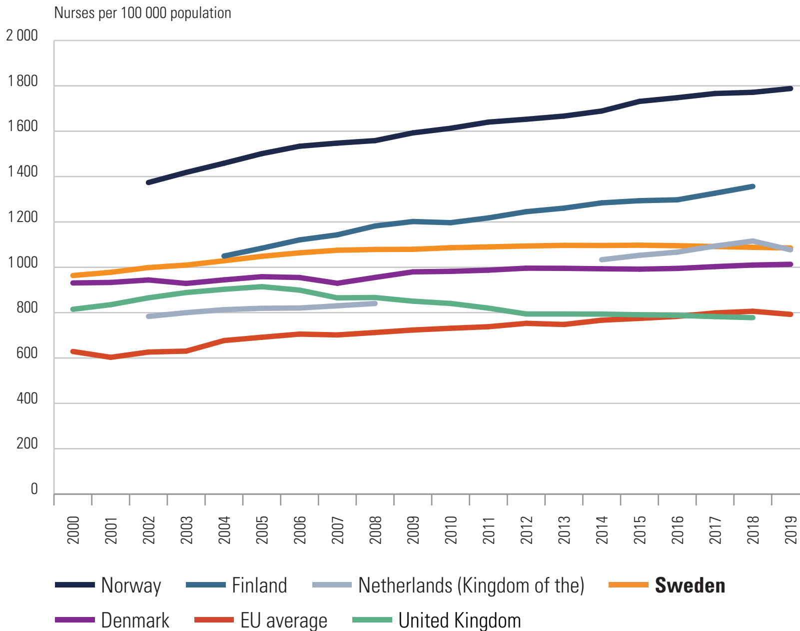
Source: Eurostat, 2022g.

Nurses

In 2019 there were 1 085 registered nurses per 100 000 inhabitants in Sweden. The number of registered nurses per inhabitant increased somewhat between 2000 and 2015, but since then there has been a slight decrease (Fig. 4.4). This trend in Sweden is similar to that in Denmark but diverges from trends in Finland, Norway and the Kingdom of the Netherlands.

The negative trend is also consistent with considerable shortages of registered nurses in regions, in particular nurses with a specialist competence. All regions reported a shortage of specialist nurses in 2020 and about half of the regions reported a shortage of registered nurses without specialist training (NBHW, 2021a).

FIG. 4.4 Number of nurses per 100 000 population in Sweden and selected countries, 2000 to 2019



Source: Eurostat, 2022h.

4.2.3 *Professional mobility of health workers*

Sweden has a positive net-migration in health care staff (Statistics Sweden, 2020). A large share of doctor licences is issued to physicians educated outside Sweden each year. In 2020, 32% of licences were issued to physicians educated in the EU/EEA (including Switzerland and the United Kingdom) and 11% to physicians educated outside the EU/EEA. Most of the physicians educated in the EU/EEA were of Swedish nationality before education. Between 2003 and 2015, the majority of licences were granted to physicians educated outside Sweden. Since then, the number of education places in Sweden has been increased and in 2020, 56% of licences were granted to physicians educated within Sweden (NBHW, 2022c).

The share of nurses who received a licence in 2020 but were educated abroad is much lower – 6% were educated in the EU/EEA and 2.5% outside the EU/EEA. A similar pattern can be observed for physiotherapists, for instance, whereas for dentists the share educated in Sweden was 65% for licences issued in 2020 (NBHW, 2022c).

BOX 4.2 Are health workers appropriately distributed?

There are large geographical differences in the number of health workers per inhabitant in Sweden with variation larger for physicians than registered nurses. There is no correlation between the number of physicians and the number of registered nurses across regions, that is, there is no pattern of some regions compensating for a low number of physicians with a high number of registered nurses or that health care staff are being concentrated in some regions (NBHW, 2021a).

Geographical differences in the supply of health workers are most pronounced for physicians in primary care. The density of GPs is 65 per 100 000 in Region Uppsala and 55 in Region Norrbotten. The number of vacancies relative to total employment in primary care is higher in rural areas (NBHW, 2021a).

A general consequence of the shortage of GPs it that the number of listed persons per GP is higher than the updated recommendation of 1 100 (NBHW, 2022b). GPs often report a stressful working environment, which may cause difficulties in recruiting and retaining GPs and a high share of GPs working part time.

The consequence of the uneven distribution across rural and non-rural areas relates to a relatively high dependency on temporary workers and agency staff, particularly in rural areas, which may have adverse effects for patients in terms of less continuity and hence lower quality.

There are also difficulties in recruiting physicians in rural areas. The most important way of recruiting to primary care is to recruit physicians for specialist training and then convince them to stay. However, as the number of physicians in specialist training is lower in rural areas (AHCSA, 2018c), such policies may aggravate geographical differences in resources.

4.2.4 *Training of health staff*

Health care staff, such as physicians and registered nurses, are educated by universities and colleges, which are owned by national government agencies under the Ministry of Education.

There are seven universities offering medical training (education to become a physician), with about 2 100 new students admitted each year. There has been a slight increase in the number of medical students over the last 10 years, from about 1 700 in 2012 (UHR, 2022).

To become a licensed physician, a student must successfully complete a study programme of 6 years and apply for a licence with NBHW. After

the licence has been granted, physicians need to complete a mandatory introductory training period (of a minimum of 6 months) before specialty training. In Sweden, the clinical training of medical doctors towards specialist competence is the responsibility of the publicly funded health providers, that is, the regions, not the universities. The current duration of speciality training, in all specialities, is a minimum of 5 years. The decision on the number of specialist training positions is highly decentralized, but increased national coordination is discussed and supported, in particular against the background of the general GP shortage.

The current organization with the 6-year education and an introductory training period before specialist training, has been in effect since 2021. Previously, the study programme was 5.5 years followed by a 21-month training period before being eligible for applying for a licence. The older system is still in effect for students who began their training before the autumn of 2021.

Registered nurses are educated at approximately 25 universities or colleges. Approximately 8 000 students are admitted to the nursing programme every year (UHR, 2022). To become a registered nurse, a student must complete a study programme of 3 years, including one or two periods of training. After having worked for a period of at least 1 year, they can continue with specialist training, which lasts for 40–60 weeks. Registered nurses can choose among 10 recognized specialist areas, for example, midwifery, intensive care and anaesthesiology.

Dentists are trained at four universities. As for medical school, admission to a university dental school requires graduation from secondary school with subjects that include natural science. The study programme lasts for 5 years and includes both theoretical and practical training.

4.2.5 *Physicians' career paths and other health workers' career paths*

Most physicians are employed by public providers or private providers with public funding. Self-employment similar to other countries such as Norway, Denmark and the Kingdom of the Netherlands is rare. GPs in primary care are often employed by the PCC. However, other contractual agreements exist, particularly between physicians and agency staff providers (see Section 3.6.2 Paying health workers).

Broadly speaking, physicians and other health care staff can undertake a clinical career, an academic career or a combination of both. Almost all physicians and about half of all nurses choose to continue their studies in order to qualify as specialists after receiving their licence to practise their profession. Physicians and nurses working in hospitals and the primary care setting can then choose to continue with an academic career, that is, entering a PhD programme, or a clinical career with or without more managerial responsibility.

The responsibility for continuing professional education for all employed medical staff rests with the employer. For physicians, an academic career is often combined with work in clinical practice. Physicians pursuing academic merits often base their research on their clinical practice and most often combine their work with patients with teaching and conducting research at universities. For other health care professionals, such as nurses, an academic career is more difficult to combine with continued work in clinical practice.

Historically, only physicians were allowed to become managing directors. In 1997, a new regulation (Clinical Directors in Health Care) was adopted, making it possible for health care workers other than physicians to become managing directors. Since then, an increasing proportion of health care workers holding managerial posts have another professional background other than as a physician, most often a nursing background (AHCSA, 2017b). When the manager is not a physician, there must also be an appointed clinical director, a physician.

Mobility

Labour market mobility among physicians is close to the average for several other health care professions. The share of publicly employed physicians leaving their public employment was 6% per year in 2021. Excluding physicians aged 60 years or older, the share is 4%. In addition, 2% change their workplace within public employment each year. A large proportion of those leaving public sector employment are likely to find new employment in the private (although publicly funded) health care sector (SALAR, 2022e).

5

Provision of services

Chapter summary

- On the national level, the Public Health Agency of Sweden has responsibility for public health, while the regions are responsible for screening programmes and public health areas included in primary care. Municipalities are responsible for areas such as school health, water and sanitation.

- The responsibility for primary health care is divided between regions and municipalities. Regions are responsible for PCCs and child and maternity care. Municipalities are, in most parts of the country, responsible for health care in ordinary and special housing for elderly people and people with functional impairments.

- PCCs employ several different professions, such as GPs, registered nurses, physiotherapists and psychologists. There is freedom of establishment of PCCs and patient choice is mandatory. PCCs are mostly financed through capitation, based on patient choice. The number of privately owned PCCs operating with public financing has increased since 2010, when freedom of establishment was introduced, although large differences in the private/public mix of PCCs exist across regions.

- A long history of investment in inpatient care has contributed to good medical quality and a high level of specialization. There are efforts towards transferring resources to outpatient care and

day-surgery. Although this has led to increased efficiency and technical innovation, overcrowding in hospitals has also increased; indicating that the number of hospital beds is insufficient.

- Since the 1970s there have been several efforts to reform the health care system towards a larger scale and scope of primary care. More recently, efforts to improve person-centred primary care have grown in importance.
- Sweden has a comprehensive, publicly financed long-term care system. National and municipality policy in recent decades promotes care in the home over institutionalized care.
- Dental care is provided by public and private operators in a competitive market. NBHW standardizes dental care across the country through regulations and general guidelines.

5.1 **Public health**

At the national level, PHA has overall responsibility for public health. Regions are responsible for primary care, child and maternal care, and youth clinics. Municipalities are responsible for social services and school health services, which are focused on preventive health care and support to students with social and mental health problems. Municipalities also have significant responsibilities in public health outside the health services, such as food control, water and sanitation. In many areas of public health, responsibilities fall within both regional and municipal health care, such as parental support and child rights issues. The regional administrative boards (*länsstyrelsen*) are the government's representatives in the regions, ensuring that national goals have an impact in the regions while taking regional conditions into account. These administrative boards are mainly involved in areas concerning social sustainability, such as living habits (see also Section 2.5 Intersectorality).

More specifically, PHA is responsible for surveillance and analysis of communicable diseases and the epidemiological situation, as well as contingency planning for outbreaks of infectious diseases. The agency coordinates and monitors the situation nationally, in close collaboration with the Regional

Medical Officers of Communicable Disease Control. The 21 infectious control units conduct the operational infection control interventions in the regions by providing support and advice to professionals and the public, and by conducting contact tracing. The basis for surveillance is the registration of around 70 notifiable diseases specified in the Communicable Diseases Act. These pathogens are notifiable to PHA and the Regional Medical Officers by both clinicians and laboratories. Diseases are categorized as generally notifiable (such as malaria and influenza), generally dangerous (for example, diphtheria, hepatitis, gonorrhoea, cholera and HIV infection) and dangerous to the community (ebolavirus, smallpox and severe acute respiratory syndrome). Some diseases are subject to mandatory contact tracing (PHA, 2022b).

The regions organize the screening programmes and are free to decide which screening programmes to implement based on recommendations from NBHW. Screening programmes may therefore differ between regions. Regarding cancer, the recommendation is general screening for breast cancer, cervical cancer and colorectal cancer. All women aged 40–74 years and 23–64 years, respectively, are offered the opportunity to take part in the screening programmes for breast and cervical cancer. A screening programme against colorectal cancer for men and women aged 60–74 years was implemented gradually in all regions during 2021–2022 and full implementation is expected in 2026 (RCC, 2022).

Preventive health care that does not require specialized medical and technical resources is the responsibility of primary care. In most regions, the general vaccination programme, child and maternal health care, and health examinations for asylum seekers are included in primary care. All regions state that the PCCs must work with health promotion and disease prevention initiatives, but some specify services that must be available such as the prescription of physical activity and support to quit smoking (NBHW, 2016). They often refer to NBHW national guidelines (NBHW, 2018a) for prevention and treatment of unhealthy living habits, with guidelines including tobacco use, risky use of alcohol, insufficient physical activity and unhealthy eating habits. However, evaluations have shown large regional differences and that preventive work by PCCs is often not sufficiently prioritized (SOU, 2018:39). Further, the regions have a network supporting their integration of health promotion in regular health services, especially in primary care. It is a part of the International Network of Health Promoting Hospitals and Health Services (HPH).

Various non-government organizations also contribute to important public health work. The sports movement has an important role and is to some extent financed by targeted grants from the national government budget, but mostly dependent on voluntary contributions and participation from hundreds of thousands of citizens.

Employers have an obligation to ensure that occupational health care is available in terms of both physical and mental services to employees. Occupational health covers approximately 60% of all employees and is financed by the employer (Swedish Work Environment Authority, 2020). The most common arrangement is that occupational health supports in health promotion, preventive work and work-oriented rehabilitation.

5.2 Patient pathways

A standard patient pathway for patients that require specialized elective care is described in Fig. 5.1 (for pathways in acute care see Section 5.5 Urgent and emergency care). The first point of contact can be (1) directly with the PCC or through the national on-line or phone service 1177, (2) with a private digital health care provider offering instant video contact, or (3) directly with outpatient specialist care, if such providers are available and depending on referral requirements in the region.

The most common patient pathway is to contact the PCC directly through a phone call, online booking system or in some instances, during drop-in hours. Additional first-line contact points are private digital health care providers (see Section 5.3 Primary care) or contacting specialist care directly without a GP referral, depending on availability and referral restrictions in the region (see Section 5.3 Primary care and Section 5.4.1 Specialized ambulatory care). After receiving a diagnosis, the patient will either receive treatment in primary care, or be referred to specialized care.

BOX 5.1 Are public health interventions making a difference?

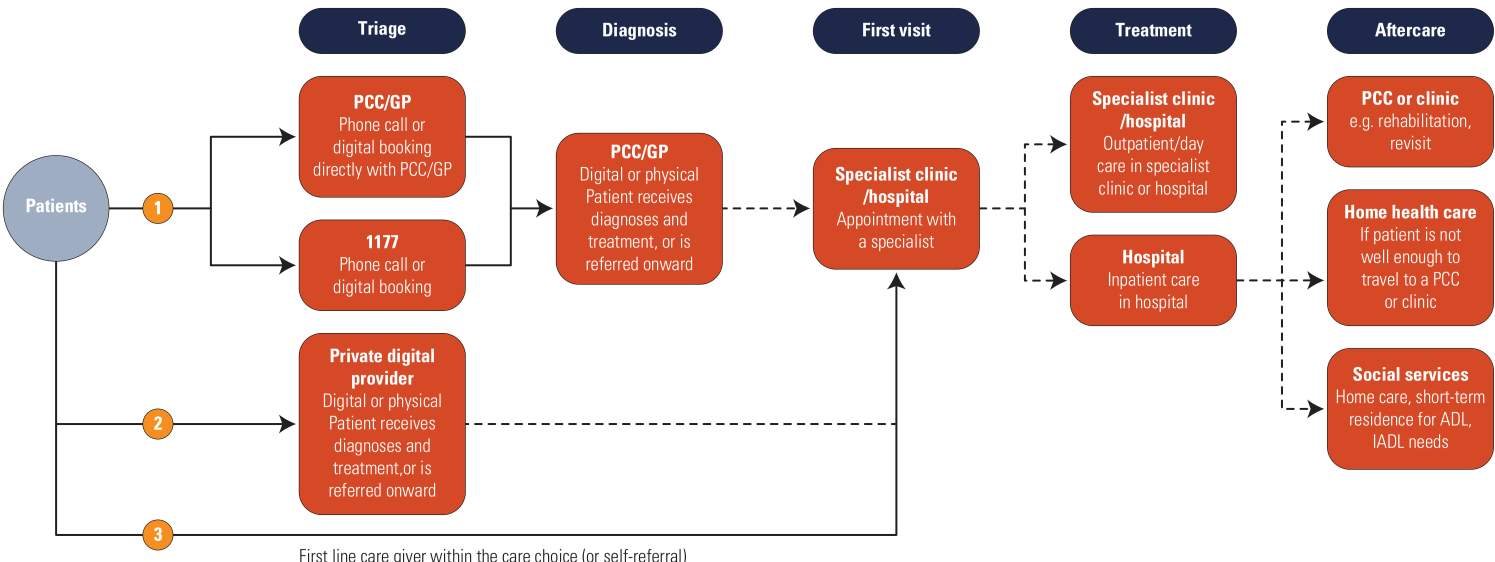
The number of daily smokers is declining and has decreased by 60% since 2006 to 6% in 2021 (PHA, 2022c). This has been achieved partly by the adoption of non-smoking campaigns, tax increases on tobacco and smoking bans in certain places. There has been an especially large decline in the younger age groups. At the same time there is concern about the increased usage of snuff: for people aged 16–29 years, the proportion who stated that they used snuff daily has increased (PHA, 2022d). In 2022, a new regulation on nicotine products came into effect, including for example that marketing should not be directed to those under 25 years.

The share of the population (aged 16–84 years) with a consumption of alcohol indicating an increased risk of alcohol-related injuries and diseases was 15% in 2021, a 10% decrease since 2006. The decrease has mainly been driven by decreased consumption in the ages 16–29 years; from 33% in 2006 to 19% in 2021, whereas other age groups have seen more mixed trends in consumption (PHA, 2022e). Public health interventions include, among others, taxation, a national government retail monopoly (*Systembolaget*) on alcohol products stronger than 3.5% and limited marketing.

As opposed to smoking and alcohol consumption, the prevalence of obesity has increased by 30% since 2006 and it is most likely one of the major causes behind the increasing burden of chronic disease and premature death. In 2021, 16% of the population reported a body mass index of 30 kg/m^2 or above, indicating obesity (PHA, 2022f). In the 2018 Health Behaviour in School-aged Children survey, only 19% of 11-year-olds, 14% of 13-year-olds and 11% of 15-year-olds had a sufficient daily level of physical activity (WHO, 2021). It was more common to report at least 4 hours a week of vigorous activity; however, Sweden had one of the largest inequalities (20+ percentage points) between girls' daily level of physical activity from low and high affluence families (WHO, 2020).

National efforts to promote physical activity and a healthier lifestyle include (for example) public awareness campaigns, targeted grants to the sports movement and health promotion in schools, as well as recommendations on Physical Activity on Prescription in clinical practice to adults who are insufficiently physically active. The PHA are coordinating a project to implement The Swedish Physical Activity on Prescription model in nine other European countries within the project European Physical Activity on Prescription (PHA, 2022g). Swedish employers also have the opportunity to give employees a deductible health promotion benefit [maximum of SEK 5 000 (EUR 470) per year in 2022] with the aim of encouraging the employees to participate in physical activities listed by the Tax Agency (for example, buying a gym card or participate in sports including golf and tennis).

FIG. 5.1 Patient pathways for elective care



Notes: ADL: activities of daily living; GP: general practitioner; IADL: instrumental activities of daily living; PCC: primary care centre.

Source: Authors' own compilation.

Other aspects of the patient pathway can also differ between regions such as the availability of drop-in hours and the supply of providers for urgent care needs during out-of-office hours (see Section 5.3 Primary care). Patients with private health care insurance are able to contact their insurance company, which will refer them to contracted private specialized providers if needed. Additionally, there are integrated care pathways targeted at specific diagnoses or patient groups in both primary and specialized care, described in Box 5.6, while emergency care is described in Section 5.5 Urgent and emergency care.

5.3 Primary care

The task of primary care in Sweden is to prevent, assess, treat and rehabilitate health care needs that do not require special medical or technical resources, only available in specialized care. In 2021, the scope of primary care was clarified in the Health and Medical Services Act as part of a large ongoing reform to strengthen the role of primary care in Sweden (see Section 6.1 Analysis of recent reforms). According to the Act, primary care shall provide health and medical services required to meet common care needs, ensure that care is easily accessible and provide preventive measures based on the patient's individual needs and conditions.

The regions finance and govern primary care directed at the general population such as PCCs, community emergency centres and maternal health care, while the municipalities finance health care for patients that receive social services, health care in the home, for example, for elderly individuals and patients that have been discharged from hospitals and require further municipality care (see Section 5.8 Long-term care). Some 70–80% of the population in Sweden visit a provider within primary care at least once during a year (AHCSA, 2020d).

Sweden has a nationally regulated freedom of choice system with free establishment within regional primary care (see Section 2.8.2 Patient choice). The choice system is administered by the 21 regions, and regions are entitled to decide independently on the PCCs' scope of responsibilities as well as conditions regarding payment systems and payment levels. All primary care providers that meet the regions' requirements have the right to sign an agreement and receive compensation from the region when providing care according to the agreement. Most regions have a basic "assignment" set of

services that PCCs should provide, including consultations in the field of general medicine, rehabilitation, psychosocial and health interventions, and local emergency services (NBHW, 2016). The organization of, for example, child health care, medical foot care, maternal health care and youth centres can be part of the basic assignment, optional added assignments or separate care choices. The extent of care choice varies between the regions, from a single choice of care provider for the entire primary care assignment (a majority of the regions) to a multitude of providers for different parts of the assignment.

The gate-keeping role of primary care varies between regions. Patients are always free to seek outpatient specialist care that is listed within their own region's care choice options if such exist, as well as seek outpatient specialized care in another region. However, the same rules for referral will apply as in the patient's home region (see Section 6.1 Analysis of recent reforms). In several regions, referral from a physician is needed for specialized outpatient care but there is also "referral-free" first line specialized care in certain regions (see Section 2.8.2 Patient choice and Section 5.4.1 Specialized ambulatory care).

PCCs usually employ four to six GPs, complemented with other staff categories such as specialist nurses, registered nurses, psychologists or counsellors, and occupational therapists. In 2020, approximately 30% of consultations within regional primary care, which includes physical consultations either at a PCC (a large majority of consultations) or in the home, were with a physician, 30% were with a nurse, 18% with a physiotherapist and 22% with other staff such as psychologists and assistant nurses. About half of the consultations were offered by private health care providers (SALAR, 2022f).

Apart from private PCCs operating under agreements with the regions and within the freedom of choice system, there are two other forms of private primary care providers. Digital health care providers located in any region but offering their services nationally supply direct contact with nurses, physicians or psychologists to provide counselling, diagnosis, certain treatments and, in some instances, referral to specialized care. In practice, this has become a new form of publicly funded first-line of care. Contacts are conducted "outside" the traditional health care system, in the sense that there is no connection to the patient's own PCC, GP or region. These digital consultations have been increasing rapidly, especially during the pandemic (see Section 3.3.4 Purchasing and purchase–provider relations and Section 6.1 Analysis of

recent reforms). There are also a few private practices that operate outside the existing system of care choice for historic reasons, which are slowly being phased out. They operate and are paid according to a national tariff regulated in the Medical Reimbursement Act (*Lag om läkarvårdsersättning* 1993:1651). There were 671 such practices in 2020, out of which approximately 20% were specialists in general medicine (AHCSA, 2021d) (Box 5.2).

During 2020 and 2021, several digital health care providers opened physical PCCs and so established themselves in several regions. This development is in line with an overall ambition to integrate physical and digital health care – so-called digi-physical care – and that patients should have the opportunity to register at a PCC that offers both digital and physical visits (AHCSA, 2022c) (see Section 3.3.4 Purchasing and purchaser–provider relations).

From 2022, and as suggested by a government investigation (SOU, 2019:42) the choice of provider has been regulated at the national level. Patients have to register in advance with a PCC (public or private) that has a contract with a region, and changing registration is restricted to a maximum of twice per 12-month period. According to a survey in 2020, 91% of the population had a regular PCC where they were listed or usually went. However, only 35% were listed with a specific care contact, such as a GP (AHCSA, 2021c).

The number of digital consultations in primary care has increased considerably, from around 20 000 in 2016 to more than 2.3 million contacts in 2020, corresponding to 7% of all primary care visits this year (AHCSA, 2022c). The growth rate in visits in 2020 was partly a result of the pandemic. Younger people and people in larger cities are overrepresented in these digital consultations (AHCSA, 2022a).

Most regions have some form of urgent care assignment in primary care for health conditions that must be assessed within 24 hours, but which are not life-threatening. In more populated areas, this usually includes so-called community emergency centres, extended opening hours for PCCs in collaboration and mobile teams, or digital consultations. In sparsely populated areas, the emergency assignment can be more extensive (SOU, 2018:39). The vast majority of patients in Sweden (92%) travelled less than 10 minutes to the nearest PCC in 2018 (NBHW, 2018b).

BOX 5.2 Private providers and ownership structure

The regions' purchases of health care services from private providers amounted to an average of 9.9% of health care sector net costs in 2021, a share that has increased from 8.8% in 2015 (SALAR, 2022b).

The proportion (in terms of costs) of private providers in primary care (35.4%) in 2021 is significantly higher than in specialized somatic (3.8%) and psychiatric care (5.2%). The number of privately owned PCCs operating with public financing has increased since 2010, when freedom of establishment was introduced. In 2020, 44% of all primary care providers were privately owned. However, large differences in the share of private providers exist across regions. The proportion is highest in Region Stockholm (68%) and lowest in Region Västerbotten (13%) in the northern part of the country.

The private forms of ownership also differ, from national chains and cooperatives to regional groups and stand-alone centres. Although most providers are for-profit, not-for-profit actors exist. National statistics on the ownership structure of primary care providers is not available, but regional data from the Stockholm and Skåne regions indicate that the largest private actors in primary care are companies or cooperatives that operate at the national level. Stand-alone and especially not-for-profit actors are less common (Dahlgren et al., 2014; Koponen, 2022). This is in line with the overall development in private welfare production within the Swedish public sector, where the proportion of for-profit commercial actors has increased during the 2000s. The not-for-profit sector is generally smaller in Sweden compared with the neighbouring countries Denmark, Norway and Finland (SOU, 2016:78).

However, there are large regional differences. Mobile teams are becoming increasingly more common, often described as a relatively new way of working, particularly with regard to making acute home care visits. Mobile teams are composed of different clinical competences aimed especially at people with greater needs, such as older people and people with chronic illness that have been frequently hospitalized and also receive municipality services. Services provided are often collaborative projects between primary care and the municipality's home health care and in some cases inpatient care (SOU, 2019:29; SALAR, 2020). Mobile teams also work proactively and develop individual plans together with patients and staff from municipalities, to improve health and avoid unnecessary acute visits to hospitals.

BOX 5.3 What are the key strengths and weaknesses of primary care?

Historically, health care in Sweden has been centred around the specialized hospital sector and primary care is often rated lower than specialized care in patient experience and trust. Attempts to strengthen the role of primary care and its resources has been on the agenda since the early 1970s, but often without clear effects. A strength, however, is multi-professional PCCs, where GPs, nurses, specialist nurses, counsellors and occupational therapists, are all involved in the care delivery. This tradition also explains why formal choices for patients and payment to providers focus on PCCs (the organizational unit) rather than individual GPs.

In recent years, the national level and regions have agreed on a reform agenda with the aim of transforming the health care system, increasingly moving care from the hospital sector to primary care, that is, PCCs, externally located specialist clinics, mobile teams, digital solutions or the patient's home. A number of activities in regions and municipalities are ongoing within this aim, but so far mainly at a strategic level, and the present adjustments when it comes to regulation have not solved the basic problems in primary care. The expected financial redistribution from hospital care to primary care has not yet occurred, and historically, this has proven difficult. There are signs that access to primary care has improved but there are still issues concerning access to care outside office hours and with care coordination. For example, because of shorter care episodes and increased responsibility for municipal health care, there are challenges concerning coordination between providers for patients with chronic illness. A major problem is the shortage of GPs with vacant positions in primary care, which was estimated at 21% in 2018 (AHCSA, 2018c).

5.4 Specialized care

In 2021, approximately 4.2 million patients received care within specialized inpatient or outpatient care (NBHW, 2022d). Out of the approximately 1.5 million patients that had a surgical procedure in 2021, about 27% underwent the surgery within inpatient care (NBHW, 2022d).

Specialized somatic care involves health and medical services requiring medical equipment or other technologies that cannot be provided in the primary care setting. Services are divided into two areas: outpatient (ambulatory and day care) and inpatient care. Structural changes in specialized care during the past decades have focused on a shift from hospital inpatient care towards

outpatient care and day care, and concentration of highly specialized care and an emphasis on separating emergency care from elective care. During the 1990s, the development towards day-surgery gained momentum, which was followed by increased specialization of smaller hospitals (orthopaedic centres, rehabilitation centres or limited emergency intake) and concentration into 24/7 emergency hospitals at the end of the decade. After that, there has been a gradual concentration of supply to larger hospitals at the regional level, particularly in the 2010s and later on also at the national level. The formation of regional cancer centres (see Section 2.3 Decentralization and centralization) in the same decade supported further concentration of services. Since 2018, national highly specialized care (formerly referred to as *Rikssjukvård*) is regulated to be performed at a maximum of five hospitals (and their adjoining units). The aim is to ensure the highest possible quality in the event of rare and advanced care requiring special competence or facilities. A special board at NBHW decides on which hospitals receive permission to provide such care, including special conditions for the permission. National highly specialized care is estimated to respond to about 4–5% of the produced volume in inpatient care (Government Bill, 2017/18:40).

5.4.1 *Specialized ambulatory care*

In 2021, 2052 consultations per 1 000 inhabitants were made in specialized somatic care, and 606 in psychiatric specialized care (SALAR, 2022f). About 22% of the consultations were privately provided, although with public financing.

A large part of specialized ambulatory care (outpatient care) consists of consultations or day-surgery. However, the shift from inpatient to outpatient settings as well as the development of medical technology has also led to an increase in hospital-related home health care as a compliment to inpatient care in some regions. Such hospital-related home health care can be provided 24/7, contains qualified medical technology and may require a hospital bed to be available in the event that the patient needs it (SOU, 2019:29).

5.4.2 *Day care*

Day care includes day-surgery and other day treatments and diagnostic procedures such as day endoscopy. In 2021, approximately 2.1 million day-care episodes were provided in Sweden (SALAR, 2022f).

An increasing number of surgical procedures are performed as day-surgery. In 2020, there were about 640 000 day-surgical care episodes, constituting about 6% of outpatient specialized care (NBHW, 2022e). There is an average of 2.1 day-surgery cases to every surgical care episode in inpatient care. There are however large variations in day-surgery rates across regions; between 2.8 and 0.9 (NBHW, 2022e). The most common procedures within day-surgery are skin procedures and cataract surgery, which is almost exclusively performed within day care. Within hand and wrist treatment, almost 90% was performed in day care and the share of day-care surgery of tonsillectomy was about 85% (NBHW, 2022e).

5.4.3 *Inpatient care*

In 2021, approximately 1 385 000 admissions took place in Swedish hospitals, but the number of episodes has been decreasing steadily since 2013 (NBHW, 2022d). The most common reason for admission to hospital was cardiovascular disease and symptom diagnoses, such as stomach and chest pains. For women, injuries and poisonings were about as common as cardiovascular disease, but the dominant reason was childbirth.

The average care episode varies between 3.2 and 4.7 days in the regions. However, this is not necessarily a sign of a potential to improve efficiency because the variations may be explained by differences in reporting. The data on average care episodes exclude geriatric and psychiatric care, but some regions include geriatric care within the hospital's medical clinics, whereas others have specific geriatric clinics excluded from the definition of inpatient care. In 2021, 405 000 patients had surgery in inpatient care (NBHW, 2022d). Apart from minor surgical interventions, operations on the musculoskeletal system (for example, hip joints and thighs) were the most common surgery category in inpatient care.

In 2019, there were 190 hospital beds per 100 000 inhabitants, a decrease of 39% since 2000 (see Section 4.1 Physical resources). Although part of the decrease in hospital beds can be explained by medical/technical innovations, enabling an increase in minimally invasive surgery, day-care surgery and outpatient treatments, it cannot account for the entire decrease. Overcrowding and relocations (patients treated at a unit other than the one that has specific competence and medical responsibility for the patient) per 100 hospital beds has increased from 4% in 2014 to 7% in 2021, indicating that the available number of hospital beds is not optimal. There are however large variations between regions, varying between 2% and 19% (NBHW, 2022f).

In 2022, there were 66 emergency hospitals where care was offered 24/7. These hospitals differ in terms of scope (assignment, services), scale (number of staff and beds) and catchment area (population served). The precise number of hospitals depends on the definition, for example, if specialized clinics without emergency units are included and if large hospitals with separate facilities in nearby cities count as one or two hospitals. Smaller county hospitals (*Länsdelssjukhus*) with 12 or 13 medical specialties and county hospitals (*Länssjukhus*) with about 20+ medical specialties exist in all 21 regions (AHCSA, 2018b). Regional hospitals with 40+ medical specialties are responsible for more advanced acute and planned care and a larger catchment area. Regional hospitals are also university hospitals with extensive teaching and research responsibilities. There are seven regional/university hospitals situated in the six collaborative health care regions (see also Section 2.2 Organization). All regional/university hospitals have advanced medical equipment and offer highly specialized care, in order to facilitate cooperation regarding tertiary medical care and to maintain a high level of advanced medical care and clinical competence. The latter is achieved by pooling patients with rare diseases or severe conditions to a few hospitals, instead of treating a small number of these patients at several hospitals. The regions that do not have their own regional hospital have agreements with neighbouring regions that can receive patients for the highly specialized care.

BOX 5.4 Are efforts to improve integration of care working?

One of the main challenges for Sweden's health care system is the coordination of care between different providers and coordination is being rated low from an international perspective (AHCSA, 2021c). There are also reports of weaknesses of care pathways within the same provider, such as referrals being sent back, complicated care chains and lack of information and communication prolonging care episodes, resulting in longer waiting times and even constituting a risk to patient safety (Hanning & Barkman, 2022).

An effort to improve coordination between different levels of care or providers are clinical pathways (*Standardiserade vårdförlopp*), introduced first in cancer care in 2015 with the purpose of shortening waiting times and reducing regional differences. Initial evaluations have shown positive effects on coordination and continuity, and improved cooperation between different actors. There have been small improvements in waiting times, but it is not established whether this is an effect of the introduction of clinical pathways (NBHW, 2019a).

Clinical pathways in other diagnostic areas were introduced in 2019 as person-centred and cohesive pathways (*personcentrerade och sammanhålla vårdförlopp*) with the purpose of providing patients with a coordinated process without unnecessary waiting times in connection with either diagnoses or treatment. As the implementation of the person-centred and cohesive pathways is recent, there is still little evidence on effects (AHCSA, 2021e).

Many patients with complex needs are treated within municipal health care. As municipalities cannot employ physicians that are involved in the treatment of patients, care by physicians needs to be coordinated with regional primary care. Regions and municipalities are required to have collaboration agreements to facilitate coordination. When an individual needs both health care and social services (such as home care), the Health and Medical Services Act (*Hälso- och sjukvårdslagen*) and the Social Services Act stipulate coordination through a so-called coordinated individual plan (*Samordnad Individuell Plan*). An effort to improve integration of care was also the Act on Coordinated Discharge, which was introduced in 2018 to promote coordination between regional and municipal providers and municipal social services for patients discharged from inpatient care (see Section 5.7 Rehabilitation/intermediate care).

BOX 5.5 What do patients think of the care they receive?

A majority of Swedish patients report that they have positive experiences of both health care staff and coordination: 83% state that they experience a positive care encounter regarding participation, co-creation, treatment and communication and 77% state that they have positive experiences of coordination between different providers. Elderly individuals and people with lower education levels were in general more positive than others. Men were also more positive towards their care encounter and coordination compared with women, and women also experienced that health personnel lacked information about their medical history to a higher degree than men. Patients with worse health, for example chronic diseases or mental illness, had worse experiences of the health care in terms of both coordination and the care encounter (AHCSA, 2022a).

Generally, Sweden is in a good international position regarding treatment experiences and participation in hospital care. In the 2021 International Health Policy survey, for example, 92% state that during the hospital stay they were as involved as they wanted in the decisions about their care and treatment and 94% state that the doctors always or often treated them in a professional manner. The results are good in comparison with other countries and have improved since 2016. However, the situation is worse in terms of participation and coordination in primary care and visiting their regular GP or care contact. For example, 74% of respondents state that the regular doctor or health care staff in primary care often or always knows important information about their medical history. In other countries, the percentage is higher between 75% and 92%. When asked how often the regular doctor or health care staff usually involve the patient as much as they wish in decisions about their care and treatment, 79% state this for Sweden, compared with between 74% and 93% in other countries (AHCSA, 2021c).

5.5 Urgent and emergency care

Emergency care generally refers to the prioritization, diagnosis and treatment of patients with acute somatic medical conditions (for psychiatric emergency care, see Section 5.11 Mental health care). It includes services in acute care hospitals as well as pre-hospital care (including routing and coordination of the ambulance or care transports). There is no specific regulation stating the task of emergency care and the regions may (within certain limits) adapt pre-hospital and hospital emergency care in the way they deem appropriate and effective. In 2016, 45% of patients in inpatient care in hospitals were admitted through emergency services in Sweden (AHCSA, 2018b).

There are about 66 emergency hospitals (depending on the detailed definition) that offer emergency services 24/7 in Sweden, including the seven regional/university hospitals (SOU, 2021:71). A majority of the population has a travel time of 30 minutes or less to the nearest emergency hospital. For about 92% of Sweden's population the nearest hospital offers access to emergency surgery. Helicopter ambulance is also available in some regions and patients living close to national boarders can receive care from, for example, hospitals in Norway if relevant (AHCSA, 2018b). Swedish Ambulance Flight is a collaborative association including all regions as members. They coordinate and perform ambulance transport with six ambulance aircraft that are on standby at three bases.

Pre-hospital emergency care in Sweden has undergone changes in parallel to structural changes across hospitals. The competence among paramedic staff has gradually increased, and ambulances must be staffed with health care personnel authorized to prepare and administer pharmaceuticals. In most cases, diagnosis and treatment start before the patient arrives at the hospital. Ambulances are staffed with at least one nurse with specialist training in pre-hospital care. Within a few regions, there is also access to units staffed with a physician (Läkartidningen, 2021).

Emergency care is to some extent specialized and concentrated and there is a systematic division of responsibilities between emergency hospitals. For trauma, serious and critical conditions, patients are often redirected to regional/university hospitals if they are deemed to require more specialized care, so called pre-hospital direct triage (AHCSA, 2018b). This development is seen as essential because several of the county emergency hospitals have a relatively small population base and limited scope for medical specialties.

A central challenge for hospital emergency services is the shortage of hospital beds (IVO, 2022). The shortage affects the outflow of patients from emergency intake units, and often creates longer stays at the emergency service, affecting both patient safety (AHCSA, 2018b) and the working environment (Karlsson & Liljenberg, 2022) in a negative way (see Section 5.4.3 Inpatient care). Staff shortages in wards and the shortage of hospital beds are in many ways connected to challenges within emergency services (see Chapter 4 Physical and human resources). The Health and Social Care Inspectorate (IVO) has also drawn attention to shortcomings in the competence and experience of medical staff at emergency departments, in particular during out-of-office hours. In many emergency departments, unlicensed physicians have been the

only medical competence physically present, with more experienced physicians only being available on-call (IVO, 2017).

An increase of patients seeking acute care, together with a decrease in the number of hospitals with full emergency services, has previously worsened problems with long waiting times for emergency services. One source of this problem has been limited availability in primary care, especially during out-of-office hours, leading patients to seek emergency care instead. More than half of emergency care visits take place during out-of-office hours (AHCSA, 2018b). Development is ongoing to increase the availability of primary care during out-of-office hours and reduce the strain on the ambulance services by increasing the use of mobile teams and community emergency services (see Section 5.3 Primary care and Section 6.1 Analysis of recent reforms). The approach varies depending on regional conditions; in some regions mobile teams are sent out while waiting for an ambulance to improve response times or to assess and treat patients who have been assessed as low priority by the emergency call-centre (Läkartidningen, 2021). In other regions, there are community emergency centres that patients can visit at all hours.

BOX 5.6 Patient pathway in an emergency care episode

Patients in emergency care have in most cases been referred to emergency services through a contact with a health care provider, most often with 1177 (Läkartidningen, 2021). Patients are registered and transferred to a waiting room for triage. The triage is usually performed by a nurse and almost all emergency services use the triage system RETTS (Rapid Emergency Triage and Treatment System). Depending on the size and scope of the hospital, there can be a single patient pathway, or the emergency unit can be divided into sections, such as emergency, medicine, surgery and orthopaedic sections. There are also often separate sections for children.

In case of acute injury or illness, the patient (or someone on behalf of the patient) calls 112. Calls are received by the national SOS Alarm operator, a not-for-profit organization owned jointly by the national government, regions and municipalities. Calls are assessed on whether there is need for an ambulance and the degree of priority of the ambulance assignment is based on the three levels of priority. Several regions have agreements with SOS Alarm on prioritization and directing of ambulances, and some have their own prioritization and routing centre or procure ambulance services from private actors.

Ambulances are staffed by health professionals that can perform health care during transport. The most common staff category in ambulance care is a nurse, usually with a master's degree in ambulance care. It is also common with ambulance paramedics. Physicians also exist but to a lesser degree. The transport policy and pre-hospital care interventions may depend on where in the country the patient is situated. For example, in the case of an acute heart attack caused by a blood clot, national guidelines by NBHW recommend thrombolysis within 30 minutes after electrocardiogram, unless primary percutaneous coronary intervention is not available within 2 hours (NBHW, 2018c). If this is the case, then thrombolysis is given pre-hospital in the ambulance or in a primary care unit. In some cases, helicopter transport or intensive care ambulances are other options to quickly reach the relevant emergency care hospital. At the emergency hospital, the patient can either be taken directly to a specialized ward through a so-called direct admission, or be assessed further at the emergency service for admission or be referred to another form of care for subacute investigation.

5.6 Pharmaceutical care

In 2021, turnover in the pharmaceutical market was SEK 54 billion (EUR 5.1 billion). The cost per capita was about SEK 4 400 (EUR 414), which is about average compared with 19 other European countries (TLV, 2022a). The Swedish pharmaceutical market consists of five main areas with different systems of financing and payment (NBHW, 2022g). For more information about regulation, provision and pricing of pharmaceuticals, see Section 2.7.4 Regulation and governance of pharmaceuticals.

- **Prescription pharmaceuticals within the national reimbursement scheme** (64% of total expenditure) are prescribed by physicians and collected by patients at pharmacies. Which pharmaceuticals are reimbursed is decided by the national agency TLV. Pharmaceuticals included in the reimbursement scheme are free of charge for children under 18. For adults, there is a high-cost protection scheme [see Section 3.4.1 Cost sharing (user charges)]. In 2021, patients paid one fifth OOP.
- **Prescription pharmaceuticals outside the reimbursement scheme** (3% of total expenditure) are prescribed by physicians and collected by patients in pharmacies. Pricing is set freely and individuals pay for them OOP in most cases.
- **Over-the-counter pharmaceuticals** (9% of total expenditure) are sold without prescription in pharmacies and retail outlets. These pharmaceuticals are not reimbursed. Pricing is set freely and individuals pay for them OOP in most cases.
- **Pharmaceuticals for inpatient care** (20% of total expenditure) are administered by care staff in hospitals and clinics. Discounts on listed prices are negotiated between the regions and pharmaceutical companies. For new pharmaceuticals, this is often done through tripartite deliberations between TLV, the regions (or the regions via the NT-council) and pharmaceutical companies. These pharmaceuticals are reimbursed in full with no fees for patients.
- **Communicable disease pharmaceuticals in accordance with the Communicable Diseases Act** (2% of total expenditure) are prescribed by physicians and collected by patients in pharmacies. These pharmaceuticals are reimbursed in full with no fees for patients. This applies for all pharmaceuticals prescribed for a

disease classified as dangerous to the public (see Section 5.1 Public health) where the prescribing physician has assessed that the medicine will reduce the risk of spreading infection, for example for hepatitis C and HIV.

A comparatively small share consists of inpatient pharmaceuticals provided by hospital pharmacies, whereas the majority of the market consists of prescription pharmaceuticals provided by approximately 1 450 pharmacy outlets and additional on-line pharmacies. Sweden has relatively few pharmacies in sparsely populated areas and a very low density of pharmacies compared with other European countries (The Swedish Pharmacy Association, 2022). In 2021, a total of 58% of men and 73% of women collected at least one pharmaceutical prescription (birth controls included). The online sale of pharmaceuticals is, however, relatively high (see Section 2.7.4 Regulation and governance of pharmaceuticals). In terms of volume, prescribed pharmaceuticals (excluding over-the-counter purchases) for high blood pressure were most common, followed by analgesics, antibiotics, antidepressants and pharmaceuticals for allergies (NBHW, 2022h).

If pharmaceuticals within the national reimbursement scheme have generic equivalents and are classified as interchangeable by MPA, the packaging with the lowest price is offered at the pharmacy. Each month, the pharmaceutical with generic competition in each package size group that has the lowest selling price per unit and enough supply throughout the price period are named "the period's product" and should be offered to patients by pharmacies. The "period's product" system for prescription pharmaceuticals is effective in terms of keeping prices low on pharmaceuticals with generic competition. In 2021, the prices for such pharmaceuticals were about 50% lower than the average of 19 other comparable European countries (TLV, 2022b). There is also a 15-year rule, which means that prices of pharmaceuticals within the reimbursement scheme that do not have generic competition are to be lowered (by TLV) after 15 years in the market. However, about 83% of pharmaceuticals on the Swedish market had no generic competition in 2021.

BOX 5.7 Is there waste in pharmaceutical spending?

Pharmaceuticals which are 5–15 years old have comparatively high prices in Sweden and are at the same time used the most. In part, the relatively high price level for new effective pharmaceuticals in comparison to older less effective pharmaceuticals in the medium period in Sweden is a result of value-based pricing. The value-based pricing aims to enable equal and early access to new and innovative medicines, while maintaining good cost control and cost-effective use over time.

It is relatively common for a new pharmaceutical included in the reimbursement scheme to keep the same price throughout the period until the patent expires. This differs from many other European countries, which might carry out regular price reductions before generic competition is introduced (TLV, 2022b). A reason is that TLV can accept a higher price for more cost-effective products (TLV, 2022b). Unlike a rule-based system, value-based pricing requires information on the effect in clinical practice, which is not always available until a pharmaceutical has been on the market for some time.

TLV has shown that there are potential cost savings for pharmaceuticals within the framework of value-based pricing (TLV, 2022a). The interventions that TLV usually uses to reduce costs for preferential medicines are price reductions according to the 15-year rule. Savings can also be achieved through re-examinations and tripartite deliberation and ordered implementation.

Another explanation is that pharmaceuticals are sometimes used in clinical practice even though they are not included in the reimbursement scheme by TLV (SOU, 2017:87). While the formulary committees in the regions (see Section 2.7.4 Regulation and governance of pharmaceuticals) annually produce a list of recommended pharmaceuticals, new drugs that are not on the list can begin to be prescribed on a large scale, although there might be lower priced replacements on the market. The main reasons for the uneven use of both old and new drugs that are assessed to be cost-effective seem to be variations in treatment traditions, variations in the evaluation of the clinical benefit of treatments and various organizational factors (SOU, 2018:89).

To achieve a cost-effective and efficient use of certain new drugs, all of Sweden's regions joined a collaboration model with authorities and companies in 2015 – referred to as nationally ordered implementation (*nationellt ordnat införande*) where they negotiate prices (tripartite deliberations) and work together on the ordered introduction and follow up of drugs following recommendations from the NT-council (TLV, 2022a). Although this is mainly applied for hospital pharmaceuticals, certain prescription pharmaceuticals are also subject to these tripartite deliberations (but without the recommendations from the NT-council). This might be for example when there is a need for nationally coherent prioritization criteria related to a new drug, or when the regions jointly enter into

agreements with pharmaceutical companies regarding different forms of discount arrangements. The deliberations may result in managed entry agreements, where a pharmaceutical company can undertake to pay part of the cost for a certain pharmaceutical. In 2021, such agreements resulted in estimated savings of about SEK 2.7 billion (EUR 254 million) for prescription pharmaceuticals (TLV, 2022a).

An ongoing development is the introduction of a so-called National Medication List, which will provide patients, health care staff, pharmacists and care providers with information about a patient's prescriptions regardless of where in the country they have been prescribed (see Section 6.1 Principal health reforms).

5.7 Rehabilitation/intermediate care

Rehabilitation and/or intermediate care when discharged from hospital can involve several actors. The regions are responsible for specialized hospital care and rehabilitation is in many regions included in the basic assignment of PCCs. However, the trend towards shorter care episodes and faster discharge rates together with medical innovation leads to an increasing number of patients in need of rehabilitation or intermediate care receiving health care at home (NBHW, 2019b). The responsibility for health and medical care in the home (including rehabilitation) lies with the municipalities within most regions. The decision on whether the patient should have rehabilitation through municipal home health care or by visiting a PCC is decided based on care needs (NBHW, 2019b). As a result of the division of responsibilities, large regional differences exist in the organization of rehabilitation and intermediate care. This may cause coordination problems, especially for patients with long-term needs (see Section 5.8 Long-term care).

The Act on Collaboration in Discharge from inpatient care was introduced in 2018 as an initiative to promote high-quality health care and care services for individuals who, after discharge, need coordinated assistance from both social services and municipal health care in the home and regional health care from hospitals or PCCs. The law should in particular promote that patients are discharged from inpatient care as soon as possible after the responsible physician has assessed that the patient is ready for discharge. The rationale is not only to avoid patient risks in inpatient care and to start care and

rehabilitation as soon as possible, but also to free up beds for patients with the greatest need (AHCSA, 2020e). The law specifies that discharge and transfer of responsibility from the regions to municipal care should include provisions of a permanent care contact, information exchange between providers and the patient and coordinated individual planning (*samordnad individuell plan*). The treating physician (together with staff from municipal primary care, social care services, other outpatient services and the patient) develops a care plan designed to achieve further rehabilitation. Once a care plan is developed, responsibility for rehabilitation is transferred to the municipality. Care plans are intended to facilitate the coordination of services for the patient and there are ongoing efforts to improve collaboration between municipalities and regions and develop more integrated services, not least for older people.

In 2020, the Act (2019:1297) on Coordination Interventions for Patients on Sick Leave was introduced, which stipulated that regions are obliged to offer coordinated efforts to patients on sick leave in order to promote their return to or entry into working life. All regions have some form of rehabilitation coordinator, and while there are no legally required competence requirements for rehabilitation coordinators, they are usually a registered nurse, occupational therapist or physiotherapist (Ds, 2018:5).

Improving the functions of rehabilitation and intermediate care are also important parts of the ongoing reform on strengthening primary care under the heading "Good and close care" (see Section 6.1 Analysis of recent reforms).

5.8 Long-term care

Sweden has an extensive formal long-term care system. In 2020, the costs of elderly care and care for people with functional impairments amounted to 2.7% and 1.5% of GDP respectively (NBHW, 2022 i,j). The majority of these costs are devoted to assistance in ordinary or special housing, focusing on activities of daily living (ADL), such as bathing, feeding and dressing, and instrumental activities of daily living (IADL), such as managing transportation, shopping, meal preparation, housecleaning and managing medications.

The responsibility for means testing, financing and organizing of long-term care services for elderly individuals and people with functional impairments lies with the municipalities. In general, receiving long-term care requires a needs-assessment, commonly assessed by the municipality by using a national guide (*Individens behov i Centrum*) although this is not required by

law. A few services do not require a needs-assessment, such as security alarms and some basic home care. National policies promote care in ordinary housing over institutionalized care for long-term care recipients, which is in line with the overall development in health care of moving care closer to the patient.

The Social Services Act (see Section 2.7.2 Regulation and governance of provision) is a framework law emphasizing the right of individuals to receive social services. It specifies that individuals have the right to receive public services such as special housing or help at home according to needs at all stages of life. In 2021, 15% of the population aged 65 and older had at least one form of assistance according to the Social Services Act (326 000 people). Out of these, 24% were living in special housing and 45% received home care, which might include both ADL and IADL assistance (but not exclusively, for example, meal distribution, accompaniment and safety alarms) (NBHW, 2022i). The rest received other forms of assistance, for example, meal distribution or safety alarms. There was a proposal of a new Social Services Act in 2020, with the purpose of developing social services to become more sustainable and preventive (SOU, 2020:47).

Children and adults with extensive functional impairments are also entitled to support under the Act Concerning Support and Service for People with Certain Functional Impairments (see Section 2.8.2 Patient choice), for example personal assistance and daily activities. In 2020, approximately 75 000 individuals received municipal support according to the Act concerning Support and Service for Persons with Certain Functional Impairments, out of which 29 000 resided in special housing for adults (NBHW, 2022j).

Municipal health care refers to health care and rehabilitation (as well as technical aids) in ordinary housing and in special accommodation. An exception is the majority of municipalities in Region Stockholm, where health care in ordinary housing is still the responsibility of the region. Patients of municipal health care are mostly recipients of long-term care, such as elderly individuals, patients with chronic diseases or patients that have been discharged from hospital following acute and/or geriatric hospital treatment. During 2021, approximately 388 000 individuals received municipal health care and 82% were 65 years or older (NBHW, 2022k and own calculation). A majority were living in special housing or received some other social service, and this becomes more common with increased age.

The municipalities are not under any certain obligations to organize health care with freedom of choice, although they can choose to do so. The organization of municipal health care is complex and varies across the

country. In general, municipal health care is provided by licensed staff such as registered nurses, physiotherapists and occupational therapists; however, the municipalities cannot employ practising physicians. Medical care from physicians is supplied by the regions, often via agreements between municipal health care or long-term care providers and regional primary care. Many residents in special housing are listed with a GP that the long-term care provider has an agreement with, but some residents may be listed with another physician or PCC. Thus, medical care to patients that receive municipality services can be provided by a large number of different PCCs and GPs, which may create coordination problems (AHCSA, 2021f). For medical needs that require specialist treatment, people with long-term care needs receive medical treatment from hospitals.

IVO has in several audits reported serious deficiencies concerning the medical care of elderly people in special housing and that many providers lack the ability to provide these patients with good care and treatment based on individual needs (IVO, 2022). There are long-known structural deficiencies in the long-term medical care of elderly people, such as the shared responsibility between regions and municipalities that may result in insufficient access to medical competence and equipment, staffing shortages and lack of trained or licensed staff as well as deficient working conditions for staff (SOU, 2020:80; IVO, 2022). While this remains a serious issue, especially in connection with the increasing needs for staff when the proportion of elderly in the population is increasing, there have also been several recent developments in the area such as targeted national government grants to increase staffing or enable staff to receive an education with retained salary.

5.9 Services for informal carers

Informal carers carry out a substantial proportion of care for elderly individuals and a significant proportion of care for people with functional impairments or long-term illness. A national survey in 2018–2019 found that 15% of the adult population regularly provides care, support or assistance to someone they are close to and that the costs for society were estimated to be just over SEK 150 billion (EUR 14 billion). This corresponds to about 3% of GDP and approximately one third of Swedish health care expenditure (Ekman et al., 2022). It is however hard to provide an exact estimate of this figure, and various studies state that the proportion of the population that performs

these services ranges from 9% to 52%, depending on different definitions and the included age groups (von Essen, Jegermalm & Svedberg, 2015). Impaired physical health, function or disability are the most common reasons why someone receives care and support from a relative and help with IADL needs. In 2018–2019, services such as home maintenance and shopping were most common, and a smaller proportion consisted of basic ADL (NBHW, 2021b).

Many informal carers' efforts are voluntary, but informal care may also be the result of deficiencies in the availability of health care and care services, such as cutbacks, reorganization, staffing issues, lack of coordination between different providers or difficulties of obtaining an evaluation of needs of health care or social services (NBHW, 2021b). Since 2009, municipalities have been obliged to offer support to informal carers of a person who is long-term ill, is elderly or has a disability (who are close relatives) according to the Social Services Act. Support for relatives refers to various physical, mental and social initiatives to facilitate the situation of the relatives but it is not directly specified what the support should consist of. The regions, who are responsible for many health care services, do not have a corresponding obligation, but the Health and Medical Services Act states that health services have a responsibility to prevent ill health, which includes identifying and working to promote health and prevent ill health with persons or groups who are at risk of suffering from ill health, including relatives.

Municipalities' support of relatives can take the form of interventions aimed at the relatives themselves (direct support) or interventions aimed at the individual according to the Social Services Act or the Act concerning Support and Service for Persons with Certain Functional Impairments, where the purpose is also to provide support or relief to relatives (indirect support). According to a study in 2018, the proportion of informal carers offered support was just under one fifth, twice as many as in 2012. The study did not indicate whether it was the municipalities, regions or civil society organizations that offered the support and there are no official statistics on the extent of municipalities' support to informal carers (NBHW, 2021b).

Relief and short-term accommodation can be given to people who already have interventions according to the Act Concerning Support and Service for People with Certain Functional Impairments or the Social Services Act to relieve the burden on relatives, both as a regular intervention or in the case of urgent needs. Municipalities can also decide to reimburse informal carers under certain circumstances ("relative-care benefits"). However, several shortcomings have been linked to support for relatives, for example that access

is not equal across the country, that the opportunities to receive financial support corresponding to the efforts are limited and that support for relatives is often seen as a separate task that is not integrated into the core activities of health care and social care.

In 2022, the government decided on Sweden's first national strategy for relatives who care for, help or support a relative (Ministry of Health and Social Affairs, 2022). The purpose of the strategy is to strengthen the relatives' perspective in health care and social care, as well as to make the support for relatives more equal across the country.

5.10 Palliative care

It is estimated that each year, about 80% of those who die in Sweden could have benefitted from some form of palliative care (The Swedish Palliative Care Register, 2022). Cancer is the largest diagnostic group in palliative care. Other large diagnostic groups are heart and lung diseases, dementia and stroke. In general, palliative care is received within the health care sector (regions and municipalities). The organization varies and palliative care can be conducted by specialized palliative care units in hospitals, at hospices or nursing homes or by advanced multi-professional mobile teams in people's homes.

Most patients receive care from several professions during the end of life. Most common are physicians and registered nurses, but palliative teams can also include counsellors, physiotherapists and occupational therapists. Since 2015, it is possible for physicians to obtain a medical supplementary specialty in palliative care. It is mandatory for all physicians, regardless of clinical specialty, to undergo a couple of days of training in palliative care. Nurses and assistant nurses also have the opportunity to specialize in palliative care.

The national objectives of care for older people and palliative care are formulated in the National Plan of Action for Geriatric Policy. According to the ethical principles applying to health care, palliative care should be one of the most highly prioritized areas within the health care sector (see Section 2.7.3 Regulation of services and goods). NBHW's national knowledge support base for palliative care contains guidance, recommendations and indicators as well as terms and definitions. There is also a national care programme, which describes both the basic conditions for good palliative care and specific treatments. It also describes differences in the final stages of life depending on the patient's illness. In 2017, NBHW also established

six target levels for palliative care in the final stages of life. The purpose is to contribute to equal care throughout the country, because regional differences in the access to and quality of palliative care remain an issue. The target levels for care in the last week of life include pain assessment for 100% of patients, prescription of opioids for pain and anti-anxiety drugs (if necessary) for at least 98% of patients, no presence of pressure ulcers for at least 90% of patients and oral health assessment for at least 90% of patients. They also include so-called breakpoint conversations (*brytpunktssamtal*) for at least 98% of patients. They are conversations, often part of an ongoing care process, between the responsible or on-duty physician and the patient, and often also health care team (for example, nurse and assistant nurses) and relatives about when to switch to palliative care at the end of life. Many of these indicators are published in the Swedish Palliative Care Register, a national quality register where care providers register responses to about 30 questions about the care of a patient during the last week of life. In 2021, 60% of all deaths were recorded in the register (The Swedish Palliative Care Register, 2022).

The national knowledge support recommends that patients and families are explicitly involved in palliative care planning. Family (or other related parties) have the right to information and support, both psychological and sometimes financial. The financial support can be received by close relatives or other closely related parties of someone who has an illness that is a significant threat to life, if recipients are employed and stay at home to care for the relative. Each patient is entitled to a maximum of 100 days of benefits and the compensation can be taken out by different relatives (one at a time) and at different times.

5.11 Mental health care

Mental health care is an integrated part of the health care system and is subject to the same legislation as other health care services with the exception of compulsory and forensic mental care, which have separate legislation (see Section 2.7.2 Regulation and governance of provision). While general public health is good and improving in Sweden, mental health deviates from this development. Costs related to mental illness were estimated to account for almost 5% of Sweden's GDP in 2015, and almost one fifth of the population was estimated to suffer from a mental health issue if substance abuse and addiction are included. Out of the costs for society, 61% were direct costs

for health care and social benefits and the rest were indirect costs such as consequences of ill health in the labour market (OECD/European Union, 2018). Of ongoing cases of sick leave in December 2021, just under half were due to a psychiatric diagnosis such as depression and anxiety (SIA, 2022).

There is a growing concern with mental health issues of children and adolescents. In 2021, around 6% of the population aged 0–17 years had been in contact with child and adolescent psychiatry, about one third of them for attention deficit hyperactivity disorder (Mission Mental Health, 2022a). There are a number of national initiatives in the area of psychiatry, mental illness and mental health with different objectives and target groups. However, because of short time horizons and varying objectives, coherent evaluation of the effect of interventions has been perceived as difficult (SOU, 2021:6).

The general areas of mental health care in Sweden are child and adolescent psychiatry, adult psychiatry and forensic psychiatry. Responsibility for most mental health care falls within the regions, such as PCCs, specialized care and child and adolescent psychiatry. However, many parts of mental care also fall within the responsibility of municipality health care, such as care for elderly and people with mental disabilities, as well as treatment for substance abuse and addiction.

The first point of contact for most patients with mental health issues is primary care. There is concern about the lack of established structures for care and follow up of mental health disorders within primary care, and knowledge support and national guidelines are often based on the logic and working methods of specialized psychiatry (SOU, 2021:6). At the same time, a majority of adults suffering from mental health issues such as depression or anxiety receive care within primary care, and only about 20% are referred to specialized psychiatry (NBHW, 2021c). There have also been issues with the coordination between primary and specialist care regarding patients with mental health issues concerning, for example, a lack of diagnosis and referral in primary care and coordinated planning (Läkartidningen, 2017). Clarifying the role of primary care in commonly occurring mental health care needs is also part of the reform “Good and close care” (see also Box 5.3). For children and adolescents, first-line care can also be child and adolescent psychiatry and student health.

In 2021, approximately 5% of the adult population were in contact with adult specialist psychiatric care, the large majority as outpatients (Mission Mental Health, 2022b). The most common diagnoses in outpatient care

were substance abuse and addiction, mood disorders, anxiety syndrome and hyperactivity disorder and behavioural disorders, although many patients lack diagnoses. Even more than somatic care, mental health care has become more outpatient directed over the past 50 years. There has been a large decrease in psychiatric hospital beds over the years. In 2021, there were about 34 beds per 100 000 inhabitants. In inpatient care, the most common diagnoses were abuse and addiction, psychosis, mood disorders and anxiety syndrome. In 2021, 21% of outpatient consultations and 3% of available hospital beds were in the private sector. There are also psychiatric emergency departments for adults and for children and adolescents. On average, about 2 600 visits are made each week to psychiatric emergency care in the country (NBHW, 2020b).

Regions are responsible for mental health care, but the municipalities are responsible for the care of people with substance abuse. In practice, the shared responsibility has proven to be unclear and results in patients being referred away from psychiatric emergency departments to municipal addiction clinics, and vice versa, which creates issues in the care of people with co-morbidity of both mental disorders and substance abuse. A government investigation in 2021 proposes that the responsibility should be transferred to the regions so that one organization provides all types of care related to mental issues, including harmful use and addiction. It should also be clear from the Health and Medical Care Act that treatment for harmful use and addiction must be coordinated with treatment for psychiatric conditions (SOU, 2021:93; 2023:5).

Digital consultations are becoming increasingly important for mental health care, for example e-health services, telephone services or traditional treatment methods offered via the Internet. Apart from traditional health care, a large number of associations and organizations offer advice and support free of charge run by volunteers for mental illness via chats and over the phone with different orientations depending on for example age and needs. Some of these are supported by government agencies such as PHA and NBHW, but also by the regions. There is a guide at the national service 1177 (see Section 2.8.1 Patient information) with support lines sorted into different categories of mental illness.

Both nurses and specialist nurses play important roles in primary care's work with mental illness. However, there are large shortages of specialist nurses in psychiatric care, and shortages are expected to become worse following expected retirements. Several regions also report a shortage of psychologists (see Section 4.2 Human resources).

5.12 Dental care

Dental care is regulated through the Dental Care Act, and the national objective is good dental health and dental care on equal terms for the entire population. This includes regular general dental care, specialist dental care and care for acute dental problems. The NBHW standardizes dental care across the country through regulations and general guidelines.

There is freedom of choice for patients in the dental care market, and dental care is provided by both public and private operators in a competitive market. The majority of Swedish dental care (about two thirds) is dental care for adults within the general state allowance for people above 23 or 24 years of age. This is a fixed general annual allowance to pay for preventive dental care and general examinations, with a higher amount paid for people aged 24–29 (to encourage early prevention) and over 65 years, as well as a high-cost protection scheme [see Section 3.4.1 Cost sharing (user charges)]. Dental care is free until the year a person turns 23 years (24 in some regions), and all children visit a dentist regularly. Preventive dental care for children and young people is the most important task of the Public Dental Service and the regions are responsible for summoning all children and young people (from around 3 years of age) for regular check-ups, advice and, if needed, treatment.

Two thirds of adult dental care within the general allowance is provided by approximately 2 000 private care providers organized in 3 550 clinics (TLV, 2020). The presence of private providers varies in the country, with the largest share in cities. The largest single private provider, with about 21% of the market, is *Praktikertjänst,* a producer cooperative owned by dentists who are also operationally responsible for clinics. However, the majority of care providers are small and have an annual turnover of less than SEK 5 million (EUR 0.47 million) (TLV, 2020). The Public Dental Service performs approximately one third of adult dental care within the framework of the government dental care support, with about 800 clinics distributed across all regions.

Dental health in the population is developing positively and in 2018, 75% of the population aged 16–84 years experienced good or very good dental health. Swedish dental care generally has a preventive approach and dentists generally call upon their registered patients for regular check-ups or treatment each or every second year. In 2019, about 77% of the population aged 24 years and over had visited a dentist for a regular check-up during the past 3 years.

The proportion was somewhat higher for those under the age of 24. About 7% of the adult population had only visited a dentist for acute treatment (SOU, 2021:8). People with lower education and who are born outside Sweden are more likely to have avoided visiting a dentist for financial reasons compared with those born in Sweden (PHA, 2022h). People with lower education, lower income and who are born outside the EU have fewer remaining and intact teeth, lower self-perceived dental health and are less likely to make regular dentist visits (SOU, 2021:8).

Although dental health in general has improved in the population, the share of pre-school children with caries has increased and country of birth and socioeconomic factors have a clear connection with the risk of caries at 6 years of age. Prevention and health promotion are important parts in identifying children at risk of developing illness and such initiatives, in collaboration with several care providers, is under development in many parts of the country, especially in vulnerable areas (NBHW, 2022l). The initiative *Increased accessibility in child health care* (2018–2020) aimed at promoting equal health through support for children with an increased risk of poorer health and dental health. Many regions used subsidies within the agreement to develop collaboration between child health care and dental care, which contributed towards a form of systematic work with children's oral and dental health that had not existed before (PHA & NBHW, 2022).

6

Principal health reforms

Chapter summary

- Health reforms since 2012 mainly relate to waiting times, continuity and coordination of care, and increasing overall health system efficiency.
- Important national-level reforms include free choice of outpatient services in the whole country, standardization and some concentration of services, the establishment of regional cancer centres, and a maximum number of health care units that can provide highly specialized care.
- Additional national-level reforms have supported developments in primary care, including collaboration between regional health care and municipal health and elderly care, and encouraging citizens to register with a PCC and seek care at the primary level, although the chronic shortage of GPs continues to pose a challenge.
- Regional-level reforms include the implementation of national reforms (as above) and attempts to standardize and concentrate specialized care within and across regions. Regions, with support from the national level, have also initiated collaboration in the National System for Knowledge-driven Management. To a high degree, the focus is on standardization of care programmes and clinical pathways involving both specialized and primary care.

- Following criticism of existing governance and management models, a majority of regions have tried to implement more trust-based models. In practice, this includes moving away from activity and P4P-based payment models, and towards fixed and/or capitated payment. Increasingly promoted are governance models that support innovative changes and enhanced health system efficiency.

- The number of citizens with private health care insurance, most often provided by their employer, has increased but is still relatively low compared with other EU countries. As a consequence of the unlimited choice of outpatient services in the country, private digital health care providers, offering instant video contacts, have grown rapidly. The growth of private digital health care providers, and to some extent private health care insurance, have initiated debate and government enquiries about the need for additional health system changes and regulation.

6.1 Analysis of recent reforms

Reforms since 2012 have been initiated at both national and local levels and cover several different themes (see Table 6.1). Several national reforms are based on policy agreements between the national level and local levels, where the government has provided development support in the form of targeted grants. Important examples are the National System for Knowledge-driven Management and efforts to develop and strengthen primary care. In these cases, SALAR has an important role in negotiating with the national government and acting as a national coordinator that provides support to regions and municipalities when implementing reforms.

TABLE 6.1 Selected health reforms and health system changes initiated from 2012 to 2022

THEMES	NATIONAL LEVEL	REGIONAL AND MUNICIPALITY LEVEL
Patient benefits and rights	Increased subsidies for dental services, screening activities, contraceptives for those under 21 years (over the period)	
	Exemption of patient fee for those 85 years and older (2017)	
	Removal of tax exemption for private insurance provided by employer (2018)	
	Adaptation to EU legislation (choice of care in other EU countries without prior authorization, and care to undocumented migrants on same terms as asylum seekers) (both in 2013)	
	Patient Act 2015, free choice of outpatient care in the country	Increased support of person-centred care (over the period)
		Patients have access to (parts of) their Electronic Medical Record (from 2012)
		Patient contracts (coherent map of planned care efforts), with government support of pilots (from 2018)
Pharmaceutical market	TLV open up for negotiations with regions in pricing and reimbursement decisions, enabling price and volume agreements with pharmaceutical companies (2013)	Collaboration between the Council on New Therapies organized by regions and TLV in pricing and reimbursement decisions. Additional local initiatives related to development and enforcement of treatment guidelines (from 2013)
	New pricing model with price reduction and price ceiling for older drugs (2014)	
	New legislation for a National Medication List in 2021, enabling patients to share information about previously prescribed medicines when seeking medical care	
Standardization of care programmes and clinical pathways	Standardization of clinical pathways in cancer care (*standardiserade vårdförlopp*) (from 2017)	National System for Knowledge-driven Management in collaboration between regions (*Nationellt system för kunskapsstyrning*) (from 2018)
		Clinical pathways in new areas (*Personcentrerade och sammanhållna vårdförlopp*) (from 2019)
	Concentration of highly specialized care (*nationell högspecialiserad vård*) (from 2018)	Concentration of acute and specialized care within and increasingly across regions (over the period)

THEMES	NATIONAL LEVEL	REGIONAL AND MUNICIPALITY LEVEL
Development of primary care, including elderly care provided by municipalities	Act supporting early discharge planning of elderly patients in need of municipal services (2018)	Implementation of national reforms and continued efforts to develop person-centred primary care (over the period)
	Changes to the health care act in 2019 and 2022, emphasizing the importance of preventive and primary care and regulating citizen's registration with primary care practices	
	Targeted grants supporting development of primary care (over the period)	
Governance and management	Formation of the Health and Social Care Inspectorate (IVO) (2013). Merger of the Swedish National Institute of Public Health (*Folkhälsoinstitutet*) and the Swedish Institute for Communicable Disease Control (*Smittskyddsinstitutet*) into the Public Health Agency of Sweden (2014). Formation of the e-health agency (*ehälsomyndigheten*) (2014). Formation of the Council for knowledge-based governance (*Rådet för styrning med kunskap*) (2015)	
	National investigation proposes how the welfare sector can take a more trust-based approach to governance and management (2018)	Development of trust-based governance and management, changes in payment systems to the favour of fixed and capitated payment (from 2014)

Notes: EU: European Union; IVO: the Health and Care Inspectorate/*Inspektionen för vård och omsorg;* TVL: the Dental and Pharmaceutical Benefits Agency/*Tandvårds- och Läkemedelsförmånsverket*.

Source: Authors' own compilation.

Several minor changes have been made since 2012 in the expansion of subsidies to different services and to various targeted patient groups (see Section 3.3 Overview of the statutory financing system). Although subsidies for dental services to individuals with chronic disease or a disability increased in both 2013 and 2018, inequities in access to services and good dental health continue to exist and be debated. Previous studies indicated that knowledge in targeted groups about increased subsidies in 2013 was limited (AHCSA, 2015b). Hence, only a small share of the target group actually used the new subsidies.

The Patient Act was introduced in 2015. The purpose was first of all to highlight the patient rights that already existed as part of other acts, thereby providing general support to development towards person-centred care across regions (see Section 2.8 Person-centred care). For example, the act on maximum waiting time that came into effect in 2010, was moved to the new act. The Patient Act also specifies that patients must receive information about their health status and the treatment provided, which was previously part of

other acts. Starting in one region in 2012, and then introduced throughout the country, patients can log on to 1177 (using their bank ID) and read (parts of) their own electronic medical records.

A new right in the Patient Act was that citizens were offered free choice of outpatient services nationally. Since this change, patients can seek primary care and outpatient specialized care in the whole country, including private providers that have a contract with a region. Providers have to give these patients the same level of priority as for patients in the region where they are located. The same requirements as in the patient's own region apply when it comes to referrals to specialist care, and the "home region" also pays for services. The act aimed at increasing access to equal care across regions, but studies indicate that citizens in general have limited knowledge of the contents of the new act and few patients use the option to choose care in other regions (AHCSA, 2021b).

The new option to seek outpatient care without restrictions has had unexpected consequences in terms of the establishment of new digital health care providers. Digital health care providers located in any one of the 21 regions have since offered their services to citizens nationally (see Section 3.3.4 Purchasing and purchaser–provider relations). Payment for consultations was originally based on general agreements between regions and was intended to be used for the few patients that seek physical outpatient services in other regions, but was later reduced to SEK 500 (about EUR 47) per digital contact (see Section 3.6 Payment mechanisms). The growth of digital health care providers picked up during 2016–2017 and was further fuelled during the pandemic, causing debate about increased expenditures and priorities not following a needs-based and cost-effective approach (Ekman & Ellegård, forthcoming).

Within the pharmaceutical market, TLV opened up for negotiations between regions and pharmaceutical companies enabling volume agreements and price reductions similar to other countries. In parallel, regions have also strengthened assessment of inpatient drugs in collaboration with TLV, including careful control and monitoring of the introduction of new and expensive medicines. In 2021, the National Medication list was introduced. This means that patients can share information about their use of medicines with new providers. Ongoing work includes making this information readily available in electronic medical records, rather than in a separate system. Implementation of the new system has been delayed by the COVID-19

pandemic and also because the digital information infrastructure in several regions is undergoing transition.

According to a new act in 2018, national specialized medical care (*nationell högspecialiserad vård*) can be performed at a maximum of five health care units that are required to meet criteria to provide the best possible care to the patient. Previously granted permission to provide so called *Rikssjukvård* has been moved to the new system. The final decisions about which units can provide highly specialized care are taken by NBHW, rather than by a board of regional representatives, as was the case previously. This change should be viewed alongside previous criticism of slow progress (AHCSA, 2013) and the benefits of concentrating care to high-volume providers (SOU, 2015:98). Highly specialized care from a national perspective only concerns selected areas and small volumes of patients, for example, liver, lung and heart transplantation. Most of the permissions granted are at university hospital units belonging to the three largest regions Stockholm, Skåne and Västra Götaland (NBHW, 2022m).

The six regional cancer centres established by the national government in 2010 received continued government support after 2012, including implementation of standardized clinical pathways (*standardiserade vårdförlopp*) with inspiration from similar reforms in Danish cancer care (NBHW, 2017). According to a report by NBHW (NBHW, 2019a), standardized clinical pathways may have contributed to shorter waiting times within several (but not all) areas of cancer care. Problems persist related to variations across regions and hospitals not reaching targets. In several cases, these problems are linked to a shortage of specialized staff. Besides implementing standardized clinical pathways within regional cancer centres, regions have increasingly attempted to standardize care programmes and clinical pathways and to some extent concentrate services both within and increasingly across regions more generally. Experiences from this work show that standards can sometimes conflict with other forms of clinical guidance (AHCSA, 2021e).

The development of standardized and evidence-based clinical pathways is supported by the National System For Knowledge-driven Management, a new initiative established by the 21 regions in collaboration in 2018. The work is organized in 26 national programme areas (*nationella program områden*) focusing on different disease areas and one primary care advisory board (*nationellt primärvårdsråd*). Each of the 21 regions acts as host of one or several national programme areas. The work of national programmes also

collaborates with national agencies, for example, NBHW that is responsible for the development of evidence-based national clinical guidelines. The National System for Knowledge-driven Management focuses on support of equitable access to evidence-based high-quality care throughout the country but it is also involved in other areas, such as the analysis of health care needs and gaps, development of medical quality registers, the controlled introduction of new medicines and providing support for national reforms and policies (SALAR, 2022g).

Perceptions of weak capacity in primary care and the chronic shortage of GPs have continued to be at the centre of the health care debate since 2012, both at national and regional levels. The high expectations that the introduction of choice and privatization of care around 2010 would contribute to changes and quality improvements have not been realized. Collaboration between regions and municipalities for frail elderly patients, not least in terms of access and continuity of GPs, continues to be a challenge. Following government investigations, the Act on Coordinated Discharge, which clarified planning responsibilities when discharging patients from hospitals, was introduced in 2018. The same year, the national government also initiated targeted funding to support the development of a new primary care system aimed at providing good quality care with an emphasis on prevention and person-centred services as close as possible to where people live (*God och nära vård,* see also Box 5.3). The content and objectives of the targeted funding have been developed together with regions and municipalities, acting jointly through SALAR. Several government investigations have been initiated since and additional changes in the health care act have clarified the responsibility of primary care and that citizens should register with a primary care practice. The latter reform, registration with a primary care practice, by and large reflects changes that regions had already introduced, but also regulates that the maximum-waiting-time guarantee in primary care only applies when patients seek care at their "home" practice. From the perspective of the population and many patients, problems related to poor access and continuity persist. The share of citizens that have a regular doctor in primary care is still low compared with most other EU/EEA countries (AHCSA, 2021g). On the positive side, the number of internships for doctors who want to become GPs has increased, although several primary care doctors are also reported to have left primary care due to perceptions of poor working conditions (see Section 4.2.2 Trends in the health workforce).

Criticism, not least from leading physicians, of activity-based payment systems, value-based care and experiences of coercive forms of control around 2012–2014, initiated a general debate about the need for more trust-based forms of governance and management. A similar criticism also emerged in other public sectors employing professional employees. At the national level, the government initiated a committee (*Tillitsdelegationen*) to promote ideas and support developments of new forms of trust-based management at both national and local government levels. During 2016–2020, the committee published several reports, including suggesting general criteria for trust-based governance and management (SOU, 2018:47). By then, several concrete changes had already been made at the national level, including the formation of the Public Health Agency of Sweden (*Folkhälsomyndigheten*), the Health and Social Care Inspectorate (IVO) and the e-health agency (*ehälsomyndigheten*) and a new council for knowledge-based governance (*Rådet för styrning med kunskap*) to support increased collaboration between government health authorities. At the regional level, concrete changes around 2015 replaced activity-based payment models in hospital care with more fixed and global budgets (Ellegård & Glenngård, 2019). In primary care, no radical change in payment systems has been implemented. Similar to when choice models were introduced around 2010, payment around 2022 was based on risk-adjusted capitation with small FFS and P4P components. Following criticism of FFS and P4P, in particular that these forms of payment added to an already high administrative burden and hampered professional autonomy, these components were smaller compared with 2010 (see Section 3.6 Payment mechanisms). Risk adjustment is based on age and socioeconomic conditions (in all 21 regions) and diagnosis using the ACG system (in about half of the regions). Studies indicate that risk-adjusted payments have incentivized private practices to establish themselves in geographical areas with poorer socioeconomic conditions (Anell, Dackehag & Dietrichson, 2018), but additional studies raise questions as to what extent the intentions for more and better care to targeted groups have actually been reached (Anell, Ellegård & Dackehag, 2021).

6.2 Future developments

With a view towards future health care challenges including the growing burden of disease, resource and staff shortages, accelerating health-tech development, and increased expectations from patients and the population,

stakeholders in Swedish health care largely agree that overall health system efficiency and effectiveness need to increase. Ongoing attempts to develop and strengthen primary care is seen as an important contribution to this end, together with innovative changes to the delivery of health care services more generally. At the same time, decision-makers are pressed by acute problems in terms of staff shortages, waiting times and limited inpatient capacity. In contrast to the general agreement on the overall challenges, opinions vary on what needs to be done more specifically, including the preferred form of governance at national and local levels.

In contrast to Denmark and Norway that have strengthened the role of the national government in different ways, the overall governance model in Swedish health care has not yet been changed. The advantages of developing six to ten regions, and the role of the national government and parliament in relation to regions and municipalities, have been debated throughout the new millennium. In 2016, a government commission suggested a new organizational map that contained six regions (SOU, 2016:48), but the national government decided not to proceed with this suggestion. Minor changes have been made over the period in terms of merging national agencies. Following the COVID-19 pandemic, national agencies, as well as regions and municipalities have been criticized by a government-initiated commission for being slow and unprepared (SOU, 2022:10).

Future developments most likely include continued discussion on a more decisive role for the national government. The number of targeted national government grants to regions and municipalities have increased in the last decade, for example, focusing on improved access to care (several grants), improved coordination and continuity, mental health, chronic diseases and women's health. Although frequently used, such grants have been criticized for being an inefficient form of development support both recently (AHCSA, 2022d) and in the past (Riksrevisionsverket, 2003; Statskontoret, 2014). The regions through SALAR often take the position that government grants should be general and linked to areas or programmes that may not be compatible with regional priorities.

Problems related to waiting times persist, in part related to experiences of a poor work environment by health care staff, which causes both recruitment and retention problems (see Section 4.2.2 Trends in the health workforce). From some quarters, and from one of the conservative parties, suggestions have been made to replace the decentralized model with a national health system. The new centre-right government that came into office following the 2022 elections

has promised to initiate an investigation with the objective to propose a transfer of responsibilities from the regions to the national level. However, the present political landscape at the national level and in the parliament, and the fact that municipal self-government constitutes part of the constitution, suggest that centralization reforms for the foreseeable future will probably have to favour incremental rather than radical change. Similar to the national level, local governments in many municipalities and regions involve alliances between parties that are unlikely to support radical changes, including additional steps towards privatization and choice in major cities.

Increasingly, governance and management models that support innovative changes and enhanced health system efficiency are called for. Innovative changes include taking advantage of digitalization opportunities. In this area, the growth of private digital health care providers is likely to spur a continued debate about how these providers can be further integrated into the health system to ensure that guidelines for needs-based priorities and cost-effectiveness are met. Additional topics discussed are how governance and management can support collaboration across regions, and an integration of the National System for Knowledge-driven Management with existing principles of governance and management in each region. An additional theme likely to fuel the future debate involves complaints about the increased administrative workload and failing and non-integrated digital systems, not least from physicians. These themes will also be fuelled by a need to ensure working conditions that can attract and retain human resources.

7

Assessment of the health system

Chapter summary

- Challenges exist with shared responsibilities across different levels of governance (national, regional and municipality) and when aligning approaches to ensure accountability and effectiveness in the health system. Studies indicate that the accountability mechanisms of general elections, choice and competition are rather weak.

- Universal coverage and caps on user charges contribute to equity in access and a low level of unmet needs, especially due to costs and travel distance. Long waiting times are a persistent challenge, in spite of recurrent policy efforts in this area.

- Possible reasons behind long waiting times include a comparatively low number of available hospital beds, shortage of health care staff, increasing population needs and low productivity across providers.

- Sweden performs well in objective measures of medical quality. The rate of avoidable hospital admissions for diabetes, chronic obstructive pulmonary disease (COPD), asthma, or congestive heart failure (CHF) and hypertension has decreased by more than one third since 2008. Mortality in cancer and diagnoses, such as acute myocardial infarction (AMI) and ischaemic stroke, has also decreased. However, Sweden performs comparatively worse in terms of limited patient

involvement in treatment decisions and person-centred care more generally, especially in primary care.

- A high uptake of modern techniques and technologies to diagnose and treat diseases and efforts to prevent accidents and unhealthy lifestyles contribute to a good health status and favourable health outcomes. Sweden compares favourably among EU countries in preventable and treatable mortality. Compared with other countries, there are relatively small gaps between sub-groups in the population.

- The low rate of treatable mortality indicates that the Swedish health care system is effective at an overall system level and focusing on selected conditions related to mortality. Health care expenditure is high compared with other countries. In terms of allocative efficiency, there is consensus at all levels of government that the overall efficiency and responsiveness of the health system could be increased by a stronger and more effective primary care system.

7.1 Health systems governance

In Sweden, all three levels of government are involved in health systems governance. At the national level, the Ministry of Health and Social Affairs with support from national government agencies are responsible for overall health care policy and high-level oversight (see Section 2.3 Decentralization and centralization). At the local level, regions and municipalities are required to set priorities based on population needs and translate priorities into overall political decisions in consideration of system constraints (for example, available resources). Regions also allocate resources and responsibilities across health care providers, monitor provider activities and hold them to account for their performance. Priority setting and decisions on resource allocation to providers are made by boards consisting of elected politicians, with designated responsibility for health care.

The governance of the health system, like all other public sector activities, is subject to the principle of public access to information (*Offentlighetsprincipen*). It entitles the public and mass media to access the documents of the national government and the regional and municipal assemblies, boards and bodies that

are part of the national and local government administration. The principle covers access to meetings of the national government, and the regional and municipal assemblies/boards, where matters on health policy development and implementation are discussed and decided (Ministry of Justice, 2020). Documents are made available through the websites of public authorities, the government, regions and municipalities.

Sweden scored 85 on Transparency International's corruption perceptions index in 2021, on a scale from 0 (highly corrupt) to 100 (very clean; no perceived corruption). Sweden was ranked 4 out of 180 countries, similar to Norway. Denmark and Finland – the best performing countries – both scored 88, while the Kingdom of the Netherlands scored 82 and the United Kingdom 78, placing them 8th and 11th, respectively (Transparency International, 2022).

Individuals can hold policy-makers at both national and local levels accountable for health policy development and priorities through the general elections every 4 years. Elections for all three levels are held on the same day. The electoral participation is high in Sweden (at 85% in 2022) (Statistics Sweden, 2022f). In pre-election surveys, individuals repeatedly rank health care as one of the most important policy areas. However, a 2022 survey indicated that the understanding about governance in health care is limited: 41% of respondents stated that they think financing and organization of health care is the responsibility of the national government (Läkartidningen, 2022). Hence, accountability mechanisms related to general elections might be weaker than the high election participation suggests.

Transparency in the health system is strengthened by the availability of more than 100 national quality registries, used for monitoring and evaluating the quality of care among providers and for assessing treatment options and clinical practice (see Section 2.6 Health information systems). These registries were originally developed by clinicians as a system to support clinical quality improvement initiatives but have increasingly become a source of information to be used in benchmarking and a tool for governance used to assess provider performance (Örnerheim, 2018). Statistics on patient experiences and waiting times in primary care are also made available online by SALAR for each PCC to help guide people in their choice of provider (see Section 2.8.1 Patient information). Although such information is intended to help individuals to make an informed choice of provider, research indicates that individuals tend to choose providers based on their previous experience, together with the location and general reputation of the PCCs, rather than through publicly

available comparative information (Glenngård, Anell & Beckmann, 2011; Dahlgren et al., 2021a).

The decentralized health system with shared responsibilities across different levels of governance is a challenge when it comes to aligning approaches to ensuring accountability and their effectiveness in the health system. Frameworks and evidence-based clinical guidelines, developed by national authorities such as NBHW, SBU and PHA, in collaboration with patient representatives, clinical experts and other relevant stakeholders, are used to guide governance at the local levels (see Section 2.4 Planning and Section 2.7 Regulation). At the national level, the capacity for systematic reviews of evidence, problem identification, policy formulation and monitoring and evaluation is generally high. There is an outspoken ambition to involve population and patient representatives in priority setting and development of guidelines, for example, in standardized care programmes developed nationally (see Section 2.7.3 Regulation of services and goods and Section 6.1 Analysis of recent reforms).

Also, at the local levels, the overall ambition is that governance and monitoring should be based on available evidence and best practice. Performance measures used by regions and municipalities to monitor and evaluate health care providers are usually related to a framework called "Good health care and social services", developed by NBHW in 2006, with inspiration from a similar framework developed by the Institute of Medicine in the USA (Institute of Medicine, 2001; NBHW, 2009). It contains six domains, namely, that all health care services provided should be knowledge-based, safe, user-oriented, efficient, equal and accessible.

The regions and municipalities use of performance measures reflecting adherence to national clinical guidelines is consistent with the so-called compliance model. This means that regions, municipalities and NBHW share common goals with regard to the objectives of the Swedish health care system. They share important objectives in the Medical Services Act and the Patient Safety Act that care should be provided on equal terms for the entire population on the basis of need and in accordance with available evidence and best practice (Fredriksson, Blomqvist & Winblad, 2014). The National System for Knowledge-driven Management (*nationellt system för kunskapsstyrning*) was formed in 2019, a collaboration between the 21 regions coordinated by SALAR (see Section 6.1 Analysis of recent reforms). Documents on care programmes, recommendations and guidelines are disseminated through the centre, intended

to facilitate the implementation and delivery of knowledge-based, equal, person-centred and efficient health care throughout the country. However, the conditions and capacity for the different stages of policy development and implementation differ across the 21 regions and 290 municipalities with regards to, for example, size and administrative capacity. There is variation in performance across regions and municipalities and a majority of regions do not live up to the promises in, for example, the Patient Act, including the waiting time guarantee (AHCSA, 2021b). Patient involvement in treatment decisions as stipulated in the Patient Act is also not reached. A recent report by AHCSA (2021c) shows that some individuals experience limited involvement in their treatment decisions and problems with continuity, accessibility and coordination of care by different providers (see also Section 2.8 Person-centred care).

In primary care and some areas of specialized care, where there is choice and competition (see Section 2.8.2 Patient choice), individuals have the possibility to directly hold providers to account by changing provider if they are not satisfied with their current one. Important objectives behind the introduction of choice and competition in primary care were to improve the responsiveness of providers towards their patients and to tackle problems with continuity and long waiting times through market mechanisms. However, although the reform led to an increase in number of private PCCs, research suggests that the effects have been modest, with small improvements in patient satisfaction and no significant effects on clinical quality (Dietrichson, Ellegård & Kjellsson, 2020). One important reason for the limited effects is that the increase in PCCs has not been accompanied by an increase in the number of GPs. Moreover, research suggests that not all groups in the population, for example, elderly people and individuals in need of psychiatric care, have the capabilities needed to navigate the health system. In some geographical areas, there are no or limited alternative providers to choose among, which weakens the accountability mechanisms related to choice and competition (Burström et al., 2017).

7.2 Accessibility

There is no defined benefits package that clarifies the scope to which services residents are entitled. The publicly financed health system covers

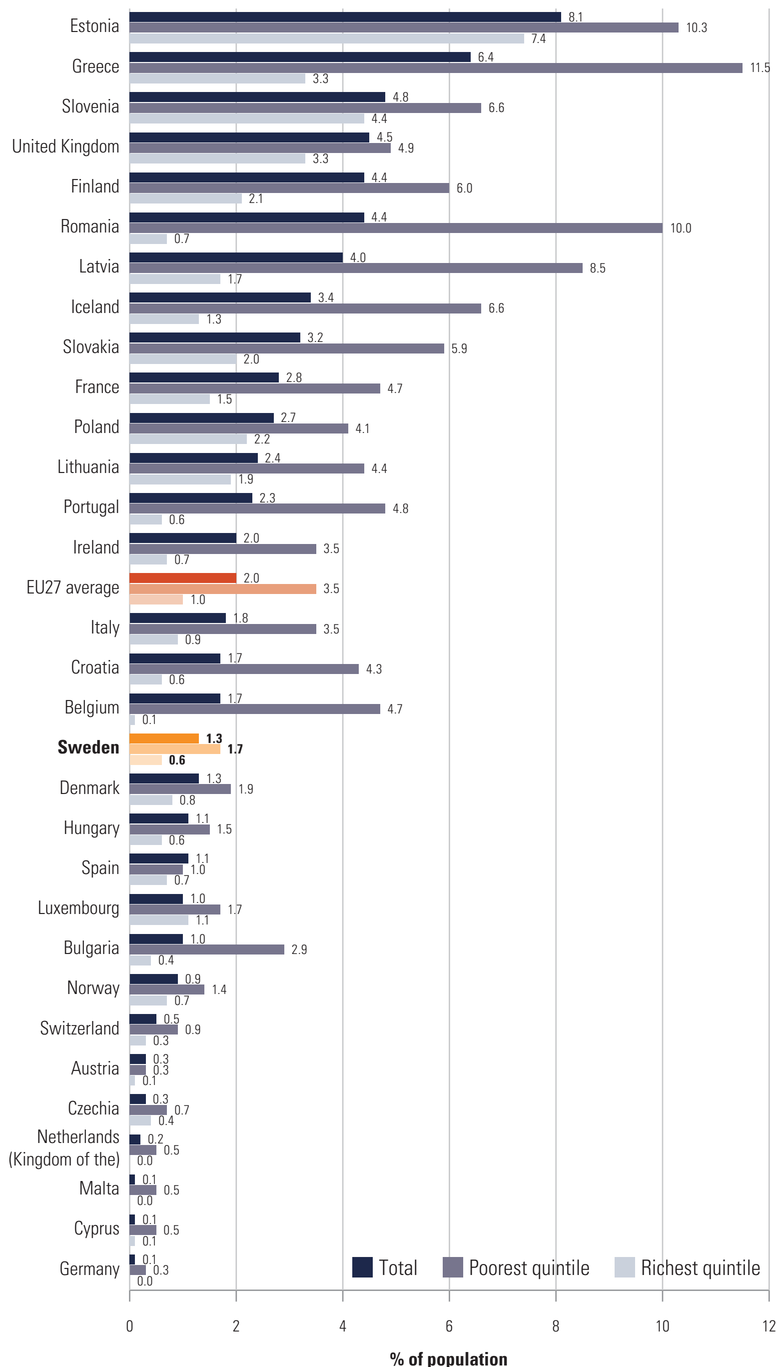
a comprehensive set of services (see Section 2.7.3 Regulation of services and goods). Universal health care covers everyone who lives or work in the country. Visitors, tourists and other non-residents have the right to emergency care, that is, care that cannot be postponed. Moreover, asylum seekers and undocumented migrants have the right to receive emergency health care (including, for example, delivery services) and dental care. The fees for non-emergency care depend on the country of residence.

7.2.1 *Low unmet needs*

Caps on user charges contribute to equity in access to care (see Section 3.3.1 Collection), with the exceptions of dental care and medical devices. In 2022, 1% of Swedish respondents in an EU-wide survey reported making informal payments, compared with the EU27 average of 4% (European Commission, 2022).

The level of unmet health care needs in Sweden is slightly below the EU average (Fig. 7.1). In 2021, 1.3% of Swedish respondents in an EU-wide survey reported unmet needs for medical examination or treatment due to costs, distance or waiting lists [Denmark 1.3%, Norway 0.9% (2020), Finland 4.4%, the United Kingdom 4.5% (2018), the Kingdom of the Netherlands 0.2%, EU27 average 2%]. Unmet needs for health care due to costs or distance are at a very low level in Sweden (0.1%). Instead, 1.2% in Sweden reported unmet need because of waiting times, which is above the EU27 average of 0.9% (Eurostat, 2023a). Among those who abstain from seeking care, people stating their health status as bad are overrepresented. Surveys also show that individuals with university or college education, those that are born outside Europe or have poor self-rated health state less often that they have access to the care they need (AHCSA, 2022a).

FIG. 7.1 Unmet needs for a medical examination (due to cost, waiting time or travel distance), by income quantile, EU/EEA countries, 2021



Notes: Norway, Slovakia, Switzerland represent data for 2020; Iceland, the United Kingdom represent data for 2018.

Source: Eurostat, 2023a.

Dental care is free of charge for those below 24 years of age. There is no cap on user charges for dental care for adults in Sweden, which contributes to inequity in access (see Section 5.12 Dental care). The level of unmet needs for dental examination or treatment due to costs, distance or waiting lists was 1.8% in 2021, which is lower than Denmark (5.0%), Norway (4.9%, 2020), Finland (5.6%) and the EU27 average (3.1%), but higher than the Kingdom of the Netherlands (0.3%) (Eurostat, 2023b). According to the survey results, 1.2% refrained from dental examination or treatment due to cost, which is lower than Norway (4.8%, 2020), Denmark (4.9%) and the EU27 average (2.6%), but higher than Finland (0.5%) and the Kingdom of the Netherlands (0.2%). Waiting time was reported as the reason for refraining from dental examination or treatment by 0.2%, compared with the EU27 average of 0.4%. Increased subsidies for dental care were introduced in 2008, 2013 and 2018. Both the total level of unmet needs for dental care and socioeconomic differences in utilization of dental care has decreased during the past two decades, in particular after 2016 (Eurostat, 2023b).

7.2.2 *Waiting times*

While waiting times in Swedish health care are not a new phenomenon, the share of patients receiving a first visit or surgery or other planned treatments within the national care guarantee has been decreasing yearly during the past decade. This is in spite of policy efforts such as allocation of additional financial resources to the regions and the establishment of a statutory care guarantee (see Section 6.1 Analysis of recent reforms). In 2021, 71% of patients had been waiting for a first visit in specialized care within the care guarantee limit, and 54% for treatment or surgery (ACHSA, 2022a). The regional variations in waiting times are large, and although gaps might be related to efficiency and lack of resources, other influencing factors are population needs, and regional and local differences in priorities. In a recent government investigation (SOU, 2022:22), the possible reasons for comparatively long waiting times were a comparatively low number of disposable hospital beds, increasing population needs, low productivity and shortage of health care staff. Fluctuating needs and demands across seasons, but also expansion of treatment frontiers as a result of technological advances, are additional explaining factors that have been proposed in studies (Rehnberg, 2019).

The Commission for accessibility (*Tillgänglighetsutredningen*) (SOU, 2022:22) found that the volume of production was too low for the inflow of patients in specialist care. In 2022, the volume of first-time visits to specialist care would have to be 5% higher to reach a balance between the inflow and outflow of patients, and the volume of surgery and other planned treatments had to be 3.5% higher. A number of explanations for the production deficit was proposed by the commission, including lack of production planning and capacity planning, shortages of hospital beds and difficulties when recruiting and retaining staff (SOU, 2022:22). Although the reduced number of hospital beds can partly be explained by technical innovation and medical development together with more advanced care taking place in patients' homes (ordinary or special housing), the entire decrease cannot be explained by this development. Recent research suggests that hospital beds have decreased faster than the medical needs, resulting in crowding in emergency care units (Af Ugglas, 2021). In recent years, the shortage of beds has been related more to staff shortages than to financial constraints (see Chapter 4 Physical and human resources and Section 5.4 Specialized care).

There are regional differences concerning accessibility and quality of health care. Long travel distances and problems with continuity of care are more common in rural areas, which may contribute to worse medical outcomes (see Section 5.3 Primary care). Attracting skilled health workers in rural areas is particularly challenging, which is a contributing factor to private providers' reluctance against establishing themselves in such areas (see Section 4.2.2 Trends in the health workforce).

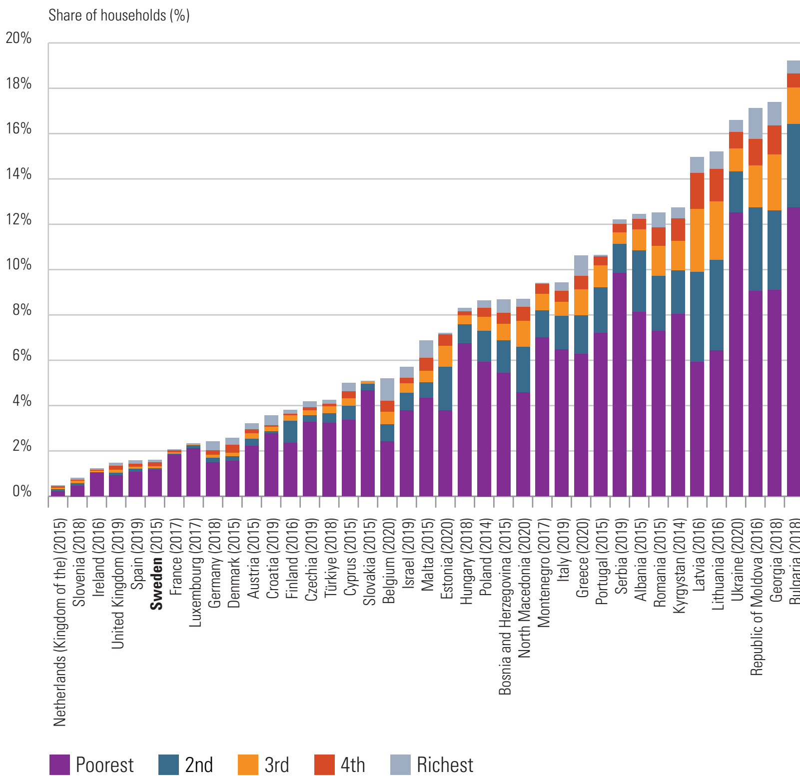
7.3 Financial protection

Factors that contribute to financial protection in Sweden include the availability of a comprehensive range of publicly financed health services for adults, and free access to all covered health services for children and adolescents, supported by high levels of public spending on health. OOP expenditures as a proportion of total expenditures on health accounted for 13% in 2020. The proportion financed via OOPs has decreased over the last 10-year period, especially during the pandemic. But even before the pandemic, financing via OOPs was about 1% lower in Sweden than the EU average (OECD/European Observatory on Health Systems and Policies, 2021). Patient fees are charged for almost

all types of services and medical products, with the exception of maternity care and primary care for children and a wide range of services for people over 85 years of age. Most of the patient fees go to medicines and dental care, which are not covered by public funding to the same extent as hospital stays and outpatient care.

Financial protection is relatively strong in Sweden compared with many other EU countries. In 2015, less than 2% of households experienced catastrophic health spending (Fig. 7.2). Although catastrophic health spending in Sweden is low on average, it is highly concentrated among the poorest households.

FIG. 7.2 Share of households with catastrophic health spending by consumption quintile, latest year



Source: WHO Barcelona Office on Health Systems Financing (forthcoming).

In order to reduce the burden of patient fees for vulnerable groups, WHO has pointed out the importance of introducing an annual cap on co-payments for dental care or inpatient care. In several other European countries, there is a single annual cap covering all co-payments, and caps are set as a very low share of household income (Glenngård & Borg, 2019). A suggested shortcoming in the general Swedish welfare policy mentioned in the WHO-report (see Section 1.2 Economic and social context) is that there are no exemptions based on household income and that older people (that is, below 85 years) are not exempt from co-payments for outpatient prescriptions and medical devices. Moreover, there is evidence of particularly striking differences across regions when it comes to user charges for prescribed medical devices and aids. A government investigation has therefore recommended introducing regulations to reduce unwarranted regional differences in this area (SOU, 2017:43).

7.4 Health care quality

The measures of medical health care quality report generally good results in Sweden and show a consistent positive trend over time. This conclusion applies to health care in general (see Section 7.5 Health system outcomes) and health care related to specific conditions. This section concentrates on specific diagnoses: diabetes, COPD, asthma, CHF, hypertension, AMI, stroke and cancer. For all of these diagnoses, there are national clinical guidelines and monitoring of process and outcome indicators.

Since 2008, the number of patients being admitted to hospitals for diabetes, COPD, asthma, or CHF and hypertension has decreased by more than one third (NBHW, 2022f). Mortality in cancer and diagnoses such as AMI and stroke have also decreased.

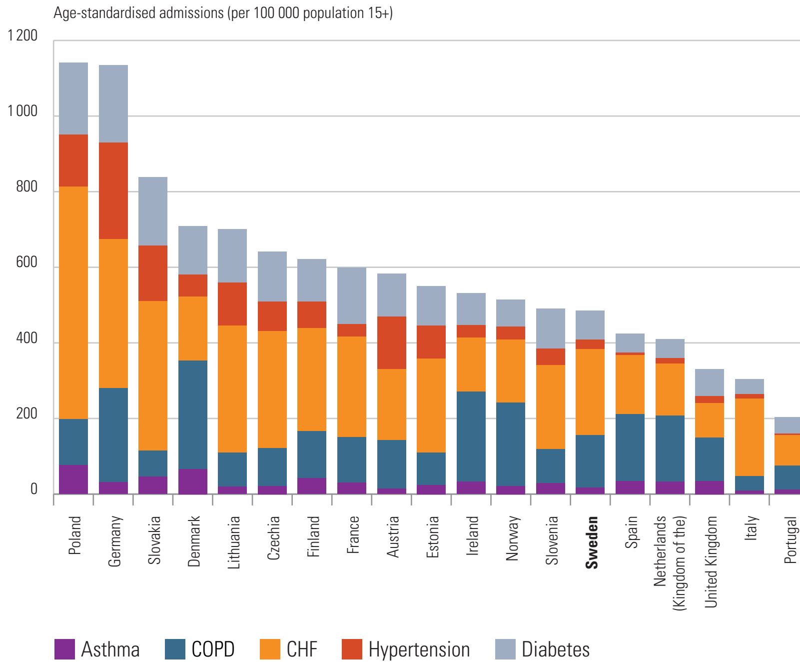
Nevertheless, weaknesses in the quality of health care also exist. For example, the division of responsibilities between municipalities and regions can cause difficulties when handling patients with multiple conditions, and also when transferring the responsibility for patients between different providers and levels of care. The International Health Policy survey showed that Swedish patients are less satisfied with the coordination of care compared with patients in other European countries (AHCSA, 2021c).

7.4.1 *Primary care*

Indicators of avoidable hospitalization for ambulatory sensitive conditions have been improving in recent years. These are defined as admissions for medical problems that are potentially avoidable if they are effectively managed in primary care or outpatient settings. The rate of avoidable hospital admissions for asthma and COPD in Sweden has decreased from 204 in 2010 to 156 in 2019 per 100 000 inhabitants aged 15 years and above (age–sex standardized rate). This is lower than comparable countries such as Denmark, Finland, Norway and the Kingdom of the Netherlands (see Fig. 7.3). There is still under-diagnosis for both asthma and COPD in primary care, however. While the number of patients that received spirometry (lung-function measurement) as recommended by the national guidelines was 90% for asthma and 80% for COPD within specialized outpatient care in 2020, the same proportions were 50% and 60% in primary care (NBHW, 2021d). This is well below the national target levels of 95%.

The number of avoidable hospital admissions for CHF and hypertension has decreased from 351 in 2010 to 253 in 2019 per 100 000 inhabitants aged 15 years and above, and the corresponding figure for diabetes has decreased from 138 to 76 per 100 000 inhabitants aged 15 years and above (OECD, 2023). Avoidable admission rates for diabetes are in line with Denmark, Finland, Norway, the United Kingdom and the Kingdom of the Netherlands (Fig. 7.3), but the avoidable admission rates for CHF and hypertension are the second highest after Finland. The quality of care for CHF, which is the single largest diagnosis group in Sweden, is monitored in the national quality register *RiksSvikt* and included in the quality register *PrimärvårdsKvalitet*. According to a recent evaluation, adherence to guidelines in CHF varies across the country and there is room for improvement (NBHW, 2018c).

FIG. 7.3 Avoidable hospital admission rates for asthma, chronic obstructive pulmonary disease, congestive heart failure, hypertension and diabetes-related complications, in Sweden and selected countries, 2020 (or latest available year)



Notes: CHF: congestive heart failure; COPD: chronic obstructive pulmonary disease. EU countries with available data

Source: OECD, 2023.

7.4.2 *Hospital care*

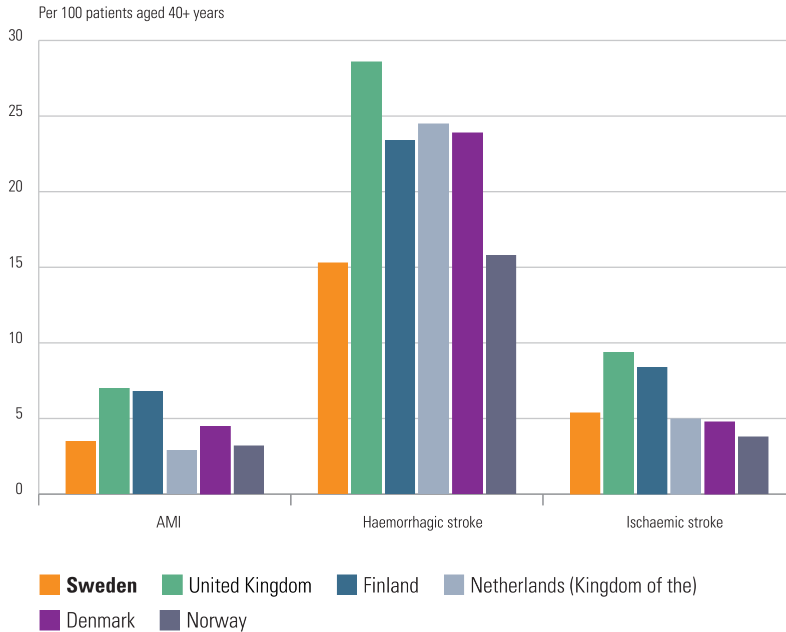
Over the last decades, both incidence and mortality in AMI have decreased continuously. In 2000, the case fatality rate for people aged 20 years and above (age-standardized) after 28 days was 35% compared with approximately 23% in 2020 (NBHW, 2021d). There are however large differences between men and women and between people with different educational levels, as well as between regions. The in-hospital mortality rate (in the same hospital to which the patient was originally admitted) for AMI was 3.5 in 2019, a decrease from the 2010 level of 4.8 (per 100 patients aged 45 and over). This is lower than Denmark, Finland and the United Kingdom, and at approximately the levels

of the Kingdom of the Netherlands and Norway (see Fig. 7.4). The national guidelines for treatment of AMI (with elevated cardiac troponin values; about 30% of AMI cases) recommends reperfusion therapy (percutaneous coronary intervention, or if not available, treatment with thrombolysis) (see Emergency care episode in Box 5.6) The national target levels are 90 minutes from first electrocardiogram to start of primary percutaneous coronary intervention, or 30 minutes for thrombolysis. In 2020, 80% of patients below 80 years of age and 70% of patients aged 80 years and above received treatment within the national target levels (NBHW, 2021d).

The in-hospital mortality rate for haemorrhagic stroke was 15.3 per 100 patients in 2019, a slight increase from 14.7 in 2010. This is lower than other comparable countries (Fig. 7.4). For ischaemic stroke, mortality rates were 5.4 in 2018 and 6.8 in 2010 per 100 patients. This is lower than Finland and the United Kingdom, and higher than Norway. National guidelines recommend that patients be admitted to a stroke unit directly on arrival at the hospital. The share of patients treated in a stroke unit has increased in recent years and was 84% at the beginning of 2020. However, regional variations are large ranging between 50% and 93% in 2020, and only two regions were above the national target level of above 90%, even though the recommendation has had high priority since 2009 (NBHW, 2021d). The share of patients with ischaemic stroke receiving reperfusion treatment with thrombolysis and/or thrombectomy as well as receiving it within 30 minutes of arrival at hospital have increased during recent years, but both are somewhat lower than the national target levels (NBHW, 2021d).

National guidelines also highlight certain rehabilitation interventions to tackle rehabilitation needs and risk of secondary disease. However, coordination after discharge is considered a problem in the health care system, especially regarding transition of care between different providers (see Box 5.3).

FIG. 7.4 In-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction, haemorrhagic stroke and ischaemic stroke, in Sweden and selected countries, 2020 (or latest year available)

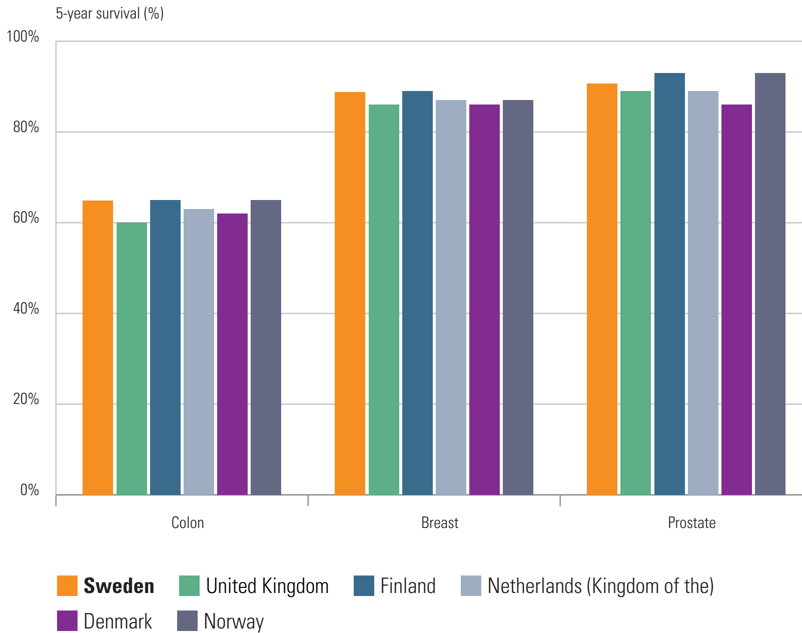


Note: AMI: acute myocardial infarction.

Source: OECD, 2023.

The 5-year survival rate for colon cancer was 65% in the period 2010–2014, at similar levels as the previous 5-year period but an increase from the period 2000–2004. The survival rate was slightly higher for women than for men, 66% compared with 64%. It is also higher than or at similar levels to Denmark, Finland, the Kingdom of the Netherlands and the United Kingdom (Fig. 7.5). The 5-year survival rate for breast cancer (among women) was 89% in the period 2010–2014, similar to the previous period. It is somewhat higher or at a similar level as Denmark, Finland, the Kingdom of the Netherlands, Norway and the United Kingdom (Fig. 7.5). The 5-year survival rate for prostate cancer (among men) was 91% among patients who had been diagnosed during 2010–2014, which is higher than in Denmark, the Kingdom of the Netherlands and the United Kingdom.

FIG. 7.5 Five-year survival rates for colon cancer, breast cancer (among women) and prostate cancer (among men) in 2010–2014



Source: Allemani et al., 2018.

7.4.3 *Antibiotics use*

Sweden has an extensive strategy against antibiotic resistance with a clear international perspective, in line with the global action plan adopted by WHO member states, the EU action plan and other international organizations. The Swedish strategy for antibiotic resistance includes several action plans and is coordinated nationally through (among others), Strama (the cooperation against antibiotic resistance) (see Section 5.6 Pharmaceutical care). In 2020, 86% of the prescription of antibiotics was attributed to primary care and specialist outpatient care (ECDC, 2021). Between 2010 and 2021, antibiotic prescribing decreased by 41%, from 385 to 226 prescriptions per 1000 inhabitants. The prescription rate varies between regions, but is consistently below the national goal of a maximum of 250 prescriptions per 1000 inhabitants (NBHW, 2022n). Antibiotic use is higher among women and among patients with a

lower level of education (NBHW, 2022f). The usage of cephalosporins (and other beta-lactams) and quinolones is low compared with other European countries. These antibiotics represent about 1% (0.1 defined daily doses/1 000 inhabitants) and 6% (0.5 defined daily doses/1 000 inhabitants) of the total antibiotics consumption prescribed in primary or outpatient care (community care), respectively, which is much lower than the EU averages of 11% and 8% (ECDC, 2021).

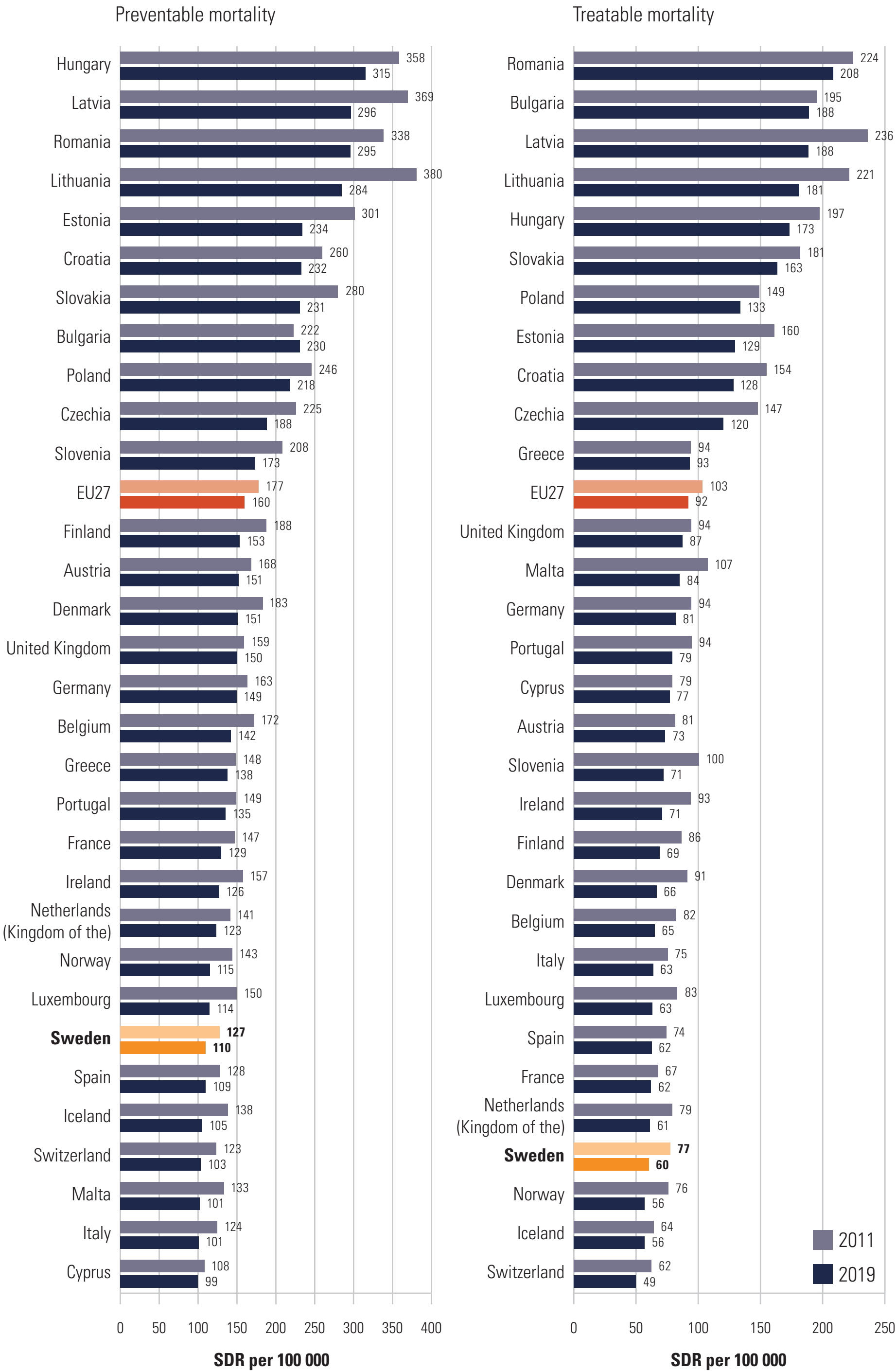
7.5 Health system outcomes

A majority of Swedish patients are satisfied with the quality of care that they receive. According to an international comparison, Swedish patients are relatively satisfied with hospital care but less satisfied with primary care when it comes to participation in treatment decisions (AHCSA, 2022a) (see Box 5.4).

Average life expectancy at birth in Sweden is among the highest in the world for both women and men. In comparison with other countries, life expectancy among Swedish men stands out more favourably than among Swedish women (see Section 1.4 Health status). As a consequence of the COVID-19 pandemic there was a decrease in life expectancy in 2020.

In comparison with other EU countries, Sweden is highly ranked for preventable and treatable mortality (Fig. 7.6). Sweden performs better in terms of preventable mortality than, for instance, Finland, Denmark, Norway, the United Kingdom and the Kingdom of the Netherlands. For mortality from treatable causes only Norway performs better. The low rate of treatable mortality, which measures the avoidance of deaths from conditions that it is possible to treat in a timely manner in modern health care, indicates that the Swedish health care system has been effective at an overall system level at focusing on selected conditions related to mortality.

FIG. 7.6 Mortality from preventable and treatable causes, 2011 and 2019



Notes: Data are for 2011 and 2019 or latest available year. Data for France is from 2017; and data for Malta and the United Kingdom are from 2018.

Source: Eurostat, 2022i.

Sweden usually performs well in comparisons of medical quality, but worse in terms of accessibility and the measures of person-centred care. In particular, the International Health Population survey shows that a lower share of patients experiences primary care as person-centred in Sweden than in for instance Norway, the Kingdom of the Netherlands and Germany (AHCSA, 2022a). This is likely to be a consequence of problems with accessibility, continuity and coordination in Swedish primary care.

As described in Chapter 1 Introduction, it is difficult to disentangle the contribution of health care from other factors. The decrease in treatable mortality is to large extent a result of decreasing mortality in ischaemic heart diseases and cerebrovascular diseases since 2000 (NBHW, 2022a).

7.5.1 *Equity of outcomes*

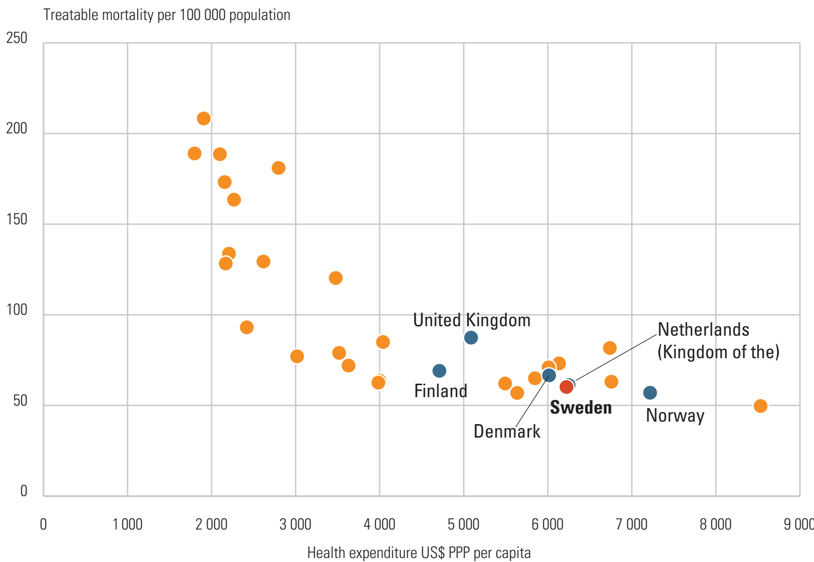
A national report shows that treatable mortality is higher for men than for women. The difference has decreased over the last 18 years – from almost 30 deaths per 100 000 inhabitants in 2000 to about 10 per 100 000 inhabitants in 2018 (NBHW, 2020a). Treatable mortality also varies with regards to socioeconomic factors. It is higher in groups of the population with lower education compared with those with a university degree. The socioeconomic differences are more persistent than those between men and women. The differences between men with lower educational attainment has decreased compared with men with higher education since 2000, but the differences between women with different educational attainment remain.

There are also geographical differences; the difference between regions with the lowest and highest treatable mortality is about 20 deaths per 100 000 population. Differences may reflect differences in the demographic and socioeconomic composition of the population across regions. When controlling for differences in population characteristics, the treatable death rate is still lower in rural municipalities compared with more urban or mixed municipalities (AHCSA, 2022a). Differences between groups in the population with different levels of education and across regions have decreased since 2013 (AHCSA, 2022a).

7.6 Health systems efficiency

One way to illustrate how the health system is performing in terms of input costs and outcomes is to plot current expenditure on health against the treatable mortality rate. Although we must be mindful that it is not possible to effectively disentangle the role of health behaviours and other determinants of the health care system in influencing the level of treatable mortality, Fig. 7.7 provides a useful entry point for discussion. Although Sweden has comparatively low rates of treatable mortality, health care expenditure is high in comparison with some countries with similar levels of mortality from treatable causes (AHCSA, 2022a). For example, compared with the United Kingdom, the treatable mortality is lower (60.2 versus 87.4 per 100 000 population), whereas the spending per capita is higher (6 223 versus 5 087 US$ PPP adjusted for differences in purchasing power per capita).

FIG. 7.7 Treatable mortality per 100 000 population versus health expenditure per capita, 2019



Note: US$ PPP: US dollars adjusted for differences in purchasing power.

Sources: WHO, 2022; Eurostat 2022i.

7.6.1 *Allocative efficiency*

Priorities in Swedish health care are guided by three principles (see Section 2.7.3 Regulation of services and goods) including the principle of cost-effectiveness. This means that when a choice has to be made between different health care options that are equal in terms of the principle of human dignity and the principle of need and solidarity, there should be a reasonable relationship between the costs and the effects, measured in terms of improved health and improved quality of life. In the event of sickness or injury, the patient is assured of receiving medical attention from institutions that have the competence and resources to handle that individual's needs (see Section 3.3.1 Coverage). At the national level, agencies incorporate evidence on cost-effectiveness in decisions on reimbursement of pharmaceuticals (TLV) and recommendations on the use of health care technology (SBU) and treatment guidelines (NBHW) (see Section 2.7.3 Regulation of services and goods). Individual priorities are then made by not only regions and municipalities but also by health care providers and in clinical praxis. This complex and decentralized structure of decisions contributes to variation when it comes to the actual use of evidence about effectiveness and cost-effectiveness in priorities and choices of treatment options in practice (see Box 2.1).

To provide the 21 regions with equal opportunities in their role as fund-holder and purchaser of health care, general national grants are allocated in accordance with a formula that evens out differences in sociodemographic conditions across regions (see Section 3.2 Sources of revenue and financial flow). In addition, targeted national grants are used to facilitate the implementation of initiatives in prioritized areas, not least to shorten waiting times and to improve care for elderly individuals and for people with mental health issues. At the provider level, the principle for allocating resources in primary care is intended to prevent providers from avoiding patients with expected high needs. PCCs are allocated fixed capitated payment per individual on their patient list, risk-adjusted for their expected need of primary care services according to morbidity and socioeconomic status (see Section 3.6.1 Paying for health services).

There has been a continuous trend of shifting services from inpatient to outpatient settings, supported by both technological developments and reform initiatives. An additional structural reform is the concentration of highly specialized care, in response to criticism against inefficient care processes

and benefits of concentrating care to high-volume providers (AHCSA, 2013; SOU, 2015:98; see Section 6.1 Analysis of recent reforms). In comparison with several other EU countries, Sweden has fewer GPs per 100 000 inhabitants. Hospital doctors make up a comparatively large share of the medical profession (see Section 4.2.2 Trends in the health workforce). Related to problems with accessibility and continuity in primary care, a relatively large proportion of patients end up visiting hospital emergency wards for conditions that could have been treated or prevented in the primary care setting (Rehnberg, 2019). Persistent weaknesses when it comes to allocation of resources to the favour of primary care (see Section 3.1 Health expenditure and Box 3.3) have resulted in additional reform attempts since 2018, under the label of "Good and close care" (*God och nära vård*) (see Section 6.1 Analysis of recent reforms). There is a general consensus at both national and local levels of government that the overall efficiency and responsiveness of the health system could be increased by a stronger and more effective primary care system, especially with regards to care of elderly individuals and patients with multi-morbidity and chronic disease (Ministry of Health and Social Affairs, 2020b).

7.6.2 *Technical efficiency*

Sweden performs relatively well with regard to selected process measures of technical efficiency, for example, average length of stay in a hospital, day-case surgery rates (see Section 5.4 Specialized care) and levels of generic prescribing/substitution of pharmaceuticals (see Section 5.6 Pharmaceutical care). With regards to input- and cost-related measures, such as staff turnover, sickness absence rates and use of staff, Swedish health care performs less well (see Section 4.2.2 Trends in the health workforce). Moreover, the technical efficiency at hospitals is weak in comparison with other countries (Rehnberg, 2019). This is partly explained by difficulties in recruiting and retaining registered nurses with a specialist degree (see Section 4.2.2 Trends in the health workforce), in turn influenced by perceptions of a poor working environment (see Section 4.2 Human resources). Sweden has the lowest number of hospital beds per capita in the EU and among the lowest length of hospital stay. At the same time, bed occupancy rates are very high, which indicates high efficiency in terms of bed use (see Section 4.1.1 Infrastructure, capital stock and investments). However, high occupancy rates and shortages of hospital beds

lead to problems with bottle-necks and, in the end, to problems with technical efficiency and even patient safety. A study based on data envelopment analysis of OECD data covering the years 2002–2009, suggests that the productivity is somewhat lower in Swedish hospitals compared with Denmark, Norway and Finland (Rehnberg, 2019 with reference to Kittelsen et al. 2008, 2015)

Related to the shift towards outpatient care, day case surgery rates have increased. Sweden is at the forefront with regards to the introduction of new treatment methods including new medical technology and day-surgery (Rehnberg, 2019). Almost all cataract surgeries are performed as day care, and the day-case surgery rates have increased also in other areas, for example, the share for day-care surgery of tonsillectomy has increased substantially over the past two decades (from about 20% in 2005 to about 85% in 2020, see Section 5.4.2 Day care).

Efficiency of pharmaceutical spending is supported by reimbursement decisions that are informed by an assessment of costs in relation to benefits of all pharmaceuticals that are part of the national reimbursement scheme. In addition, generic substitution is mandatory between medically equivalent drugs (see Section 2.7.4 Regulation and governance of pharmaceuticals and Box 5.7). TLV is the national authority responsible for pricing and reimbursement decisions, and assessment of prescription and hospital pharmaceuticals based on data and studies submitted by pharmaceutical companies. Regarding new and expensive pharmaceuticals, the NT-council (see Section 2.2 Organization) issues recommendations to the regions in collaboration with TLV, which sometimes causes delay in uptake.

Team-based primary care, which has been practised by tradition in Sweden since the early 1970s, is widely considered to be one way of improving an efficient use of resources through the substitution of GP labour input for nurses and other non-GP labour input (Yarnall et al., 2009). The practice of team-based primary care largely explains the relatively low number of GP appointments in Swedish primary care practices (Olsen et al., 2016; see Section 5.3 Primary care). It also explains the low number of visits per GP in comparison with other countries, as repeat visits by stable chronic patients and minor health needs are often taken care of by specialist nurses or other professional staff categories. Still, staff turnover and sickness rates are high in primary care. GPs and other staff categories also report that they devote a relatively large proportion of their time to administrative work, which diverts attention from patients and creates work-related stress (Holmgren et al., 2019;

AHCSA, 2020f). More recently, digital consultations have increased (see Section 5.2 Patient pathways and Section 5.3 Primary care). On the one hand, increased access to digital health care may alleviate unmet demand for primary care. On the other hand, an increased use of digital consultations can also increase inequalities in access to primary care, depending on differences in levels of digital literacy across groups (Dahlgren et al., 2021b).

8

Conclusions

The Swedish health care system has high public funding, universal coverage, an ambitious uptake of modern techniques and technologies, and efforts to prevent accidents and unhealthy lifestyles. These attributes contribute to low levels of unmet needs, favourable health outcomes and good health status in the population compared with other countries. Yet challenges persist with long waiting times and shortcomings in person-centredness, including gaps in continuity and insufficient coordination of care. The primary care sector is relatively weak with a chronic shortage of GPs and the share of citizens that have a regular doctor in primary care is low compared with other countries. Further, there remains unwarranted variation in health outcomes across socioeconomic groups, which contrasts with the strong emphasis on equality in the legislation.

Improving availability has been an explicit policy goal with efforts including the introduction of privatization and choice in primary care and selected areas of specialist care; however, problems of weak availability and poor continuity persist. Since 2012, reforms have mainly focused on improving waiting times, continuity and coordination of care, and overall health system efficiency. Reform efforts have been directed at strengthening the primary care sector, with an emphasis on prevention and person-centred services as close as possible to where people live; increased collaboration between regional health care and municipal health and social care; and PCCs as the first point of contact for citizens. Since 2015, patients can freely choose outpatient services throughout the country. The number of internships for GPs has increased, but in parallel some primary care doctors are working less than full-time, one reason being dissatisfaction with working conditions. Reform themes in specialist care concentrate on the implementation of evidence-based and standardized care processes and further concentration of services both at national and regional levels. The 21 regions have initiated the National System

for Knowledge-driven Management to support this development. Additional support is provided by the six regional cancer centres and new legislation that specifies the maximum number of hospitals that can provide highly specialized national care.

An important policy goal is to increase overall health system efficiency. The ongoing effort to develop and strengthen the primary care sector is seen as an important contribution to this end. Further, the regions have changed the financial incentives to providers by moving away from activity and P4P-based payment models, towards fixed and/or capitated payment. Other innovative changes include support of substitution between staff categories and implementing digitalization. The rapid growth of private digital health care providers since 2016, offering instant video contacts throughout the country, is likely to fuel a continued debate about how such providers can be integrated into the health system. Further debates concern how governance and management can support collaboration across regions and municipalities, and the integration of the National System for Knowledge-driven Management with existing principles of governance and management in each region. Development in these areas needs to consider complaints among the health professionals about an increased administrative workload and failing and non-integrated digital systems, not least from physicians.

Future developments are likely to include continued discussion on a more decisive role for the national government. The newly elected (in 2022) centre-right government has promised to investigate a transfer of responsibilities from the regions to the national level; however, the present political landscape at the national level and in the parliament, and the fact that municipal self-government constitutes part of the constitution, suggest that such reforms will probably need to focus on incremental rather than radical change. Although there is a general agreement on the problems and overall challenges, opinions about solutions and the preferred form of governance at national and local levels vary.

9

Appendices

9.1 References

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9.2 Relevant Legislation

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Act on Collaboration in Discharge from inpatient care [*Lag om samverkan vid utskrivning från sluten hälso- och sjukvård*] SFS [*Svensk Författningssamling*] 2017:612.

Act on Coordination Interventions for Patients on Sick Leave [*Lag om koordineringsinsatser för sjukskrivna patienter*] SFS [*Svensk Författningssamling*] 2019:1297

Act Concerning Support and Services for People with Certain Functional Impairments [*Lagen om Stöd och Service till vissa Funktionshindrade*] SFS [*Svensk Författningssamling*] 1993:387

Act on exemption from fees for certain screening within the health care system. [*Lag om avgiftsfrihet för viss screening inom hälso- och sjukvården]* SFS [*Svensk Författningssamling*] 2016:659.

Act on Freedom to Establish Private Practice [*Lag om etableringsfrihet för husläkare*] SFS [*Svensk Författningssamling*] 1994:1960 (included in Act 1993:588).

Act on Health Data Registers [*Lag om hälsodataregister*] SFS [*Svensk Författningssamling*] 1998:543.

Act on Professional Activities in Health and Medical Services [*Lag om yrkesverksamhet på hälso- och sjukvårdens område*] SFS [*Svensk Författningssamling*] 1998:531.

Act on System of Choice in the Public Sector [*Lag om valfrihetssystem, LOV*] SFS [*Svensk Författningssamling*] 2008:962.

Act on the National Medication List [*Lag om nationell läkemedelslista*] SFS [*Svensk Författningssamling*] 2018:1212.

Communicable Diseases Act [*Smittskyddslagen*] SFS [*Svensk Författningssamling*] 2004:168.

Compulsory Mental Care Act [*Lagen om psykiatrisk tvångsvård*] SFS [*Svensk Författningssamling*] 1991:1128.

Dental Care Act [*Tandvårdslagen*] SFS [*Svensk Författningssamling*] 1985:125.

Family Doctor Act [*Lag om husläkare*] SFS [*Svensk Författningssamling*] 1993:588.

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Higher Education Act [*Högskolelag*] SFS [*Svensk Författningssamling*] 1992:1434.

Local Government Act [*Kommunallagen*] SFS [*Svensk Författningssamling*] 2017:725.

The Language Act [*Språklag*] SFS [*Svensk Författningssamling*] 2009:600.

Medical Products Committees Act [*Lag om Läkemedelskommittéer*] SFS [*Svensk Författningssamling*] 1996:1157.

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National regulations and general guidelines on the prescription and handling of medicines in health care [*Socialstyrelsens föreskrifter och allmänna råd om ordination och hantering av läkemedel i hälso- och sjukvården*] HSLF-FS 2017:37.

Patient Act – [*Patientlag*] SFS [*Svensk Författningssamling*] 2014:821.

Patient Data Act [*Patientdatalagen*] SFS [*Svensk Författningssamling*] 2008:355.

Patient Injuries Act [*Patientskadelagen*] SFS [*Svensk Författningssamling*] 1996:799.

Patient Safety Act [*Patientsäkerhetslag*] SFS [*Svensk Författningssamling*] 2010:659.

Public Procurement Act [*Lag om offentlig upphandling, LOU*] SFS [*Svensk Författningssamling*] 2016:1145.

Social Services Act [*Socialtjänstlagen*] SFS [*Svensk Författningssamling*] 1980:620, new Act adopted 2002-01-01: SFS [*Svensk Författningssamling*] 2001:453.

Swedish constitution [*Regeringsformen*] 1974:152

The Hospitals Act [*Sjukhuslagen*] 1928:303.

9.3 Useful web sites

Ministry of Health and Social Affairs
https://www.government.se/government-of-sweden/ministry-of-health-and-social-affairs/

National Board of Health and Welfare [*Socialstyrelsen*]
https://www.socialstyrelsen.se/en/

Swedish Association of Local Authorities and Regions [SKR]
https://skr.se/skr/tjanster/englishpages.411.html

The Dental and Pharmaceutical Benefits Agency [TLV]
https://www.tlv.se/in-english.html

Public Health Agency of Sweden [*Folkhälsoinstitutet*]
https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/

Swedish Agency for Health and Care Services Analysis
https://www.vardanalys.se/in-english/

Swedish Medical Association [*Sveriges Läkarförbund*]
https://slf.se/in-english/

Swedish Association of Health Professionals [*Vårdförbundet*]
https://www.vardforbundet.se/in-english/

Swedish portal for information and services in health and care
www.1177.se

9.4 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The latest version of the template (2019) is available on the Observatory website at https://eurohealthobservatory.who.int/publications/i/health-systems-in-transition-template-for-authors.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents, to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in All Policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers and health workers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which IT systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care and dental care.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment of systems for monitoring health system performance, the impact of the health system on population health, access to health services, financial protection, health system efficiency, health care quality and safety, and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references and useful websites.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following.

- A rigorous review process.
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches).

The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with one another to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

9.5 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

9.6 About the authors

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The Health Systems in Transition Series

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country reports provide an analytical description of each health system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond.

The HiTs are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health services;
- to describe accurately the process, content and implementation of health reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policymakers and analysts in countries of the WHO European Region.

How to obtain a HiT

All HiTs are available as PDF files at www.healthobservatory.eu where you can also join our list for monthly updates of the activities of the European Observatory on Health Systems and Policies, including new HiTs, books in our co-published series with Cambridge University Press, Policy briefs, Policy Summaries, and the Eurohealth journal.

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(2012)

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(2013, 2020)

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(2001[g], 2007[g], 2014[g])

Veneto Region, Italy
(2012)

All HiTs are available in English. When noted, they are also available in other languages:

- [a] Albanian
- [b] Bulgarian
- [j] Estonian
- [c] French
- [d] Georgian
- [e] German
- [k] Polish
- [f] Romanian
- [g] Russian
- [h] Spanish
- [i] Turkish

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The Observatory is a partnership, hosted by WHO/Europe, which includes other international organizations (the European Commission); national and regional governments (Austria, Belgium, Finland, Ireland, Kingdom of the Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy (with Agenas)); other health system organizations (the French National Union of Health Insurance Funds (UNCAM), the Health Foundation); and academia (the London School of Economics and Political Science (LSE) and the London School of Hygiene & Tropical Medicine (LSHTM)). The Observatory has a secretariat in Brussels and it has hubs in London (at LSE and LSHTM) and at the Berlin University of Technology.

HiTs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.

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