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Sweden: health system review

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Sweden

Health system review

Anders Anell
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Health Systems in Transition

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Sweden:

Health System Review 2012



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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, 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. 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;
- to describe the institutional framework, the process, content and implementation of health care reform programmes;
- to highlight challenges and areas that require more in-depth analysis;
- to 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
- to 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

the World Health Organization (WHO) Regional Office for Europe's European Health for All database, data from national statistical offices, Eurostat, the Organisation for Economic Co-operation and Development (OECD) Health Data, data from 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 situation. 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 info@obs.euro.who.int.

HiT profiles and HiT summaries are available on the Observatory's web site at <http://www.healthobservatory.eu>.

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This edition was written by Anders Anell and Anna H. Glenngård (Lund University). It was edited by Sherry Merkur, Research Fellow, working with the support of Sarah Thomson, Research Director, both from the Observatory's team at the London School of Economics and Political Science. The basis for this edition was the previous HiT on Sweden, which was published in 2005, written by Anna H. Glenngård, Frida Hjalte, Marianne Svensson and Anders Anell and edited by Vaida Bankauskaite.

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List of abbreviations

ALOS	Average length of stay
AMI	Acute myocardial infarction
DRG	Diagnosis-related group
EU	European Union
GDP	Gross domestic product
GP	General practitioner
HSAN	Medical Responsibility Board (<i>Hälso- och Sjukvårdens Ansvarsnämnd</i>)
IT	Information technology
LIF	Trade association for the pharmaceutical industry in Sweden (<i>Läkemedelsindustriföreningen</i>)
MPA	Medical Products Agency (<i>Läkemedelsverket</i>)
NPM	New Public Management
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket
OTC	Over-the-counter
P4P	Pay-for-performance
PPP	Purchasing power parity
RCC	Regional Cancer Centre
SALAR	Swedish Association of Local Authorities and Regions (<i>Sveriges Kommuner och Landsting</i>)
SBU	Swedish Council on Technology Assessment in Health Care (<i>Statens Beredning för Medicinsk Utvärdering</i>)
SEK	Swedish krona
TLV	Dental and Pharmaceutical Benefits Agency (<i>Tandvårds- och Läkemedelsförmånsverket</i>)
VHI	Voluntary health insurance

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Abstract

Life expectancy in Sweden is high and the country performs well in comparisons related to disease-oriented indicators of health service outcomes and quality of care. The Swedish health system is committed to ensuring the health of all citizens and abides by the principles of human dignity, need and solidarity, and cost-effectiveness. The state is responsible for overall health policy, while the funding and provision of services lies largely with the county councils and regions. The municipalities are responsible for the care of older and disabled people. The majority of primary care centres and almost all hospitals are owned by the county councils. Health care expenditure is mainly tax funded (80%) and is equivalent to 9.9% of gross domestic product (GDP) (2009). Only about 4% of the population has voluntary health insurance (VHI). User charges fund about 17% of health expenditure and are levied on visits to professionals, hospitalization and medicines. The number of acute care hospital beds is below the European Union (EU) average and Sweden allocates more human resources to the health sector than most OECD countries.

In the past, the Achilles' heel of Swedish health care included long waiting times for diagnosis and treatment and, more recently, divergence in quality of care between regions and socioeconomic groups. Addressing long waiting times remains a key policy objective along with improving access to providers. Recent principal health reforms over the past decade relate to: concentrating hospital services; regionalizing health care services, including mergers; improving coordinated care; increasing choice, competition and privatization in primary care; privatization and competition in the pharmacy sector; changing co-payments; and increasing attention to public comparison of quality and efficiency indicators, the value of investments in health care and responsiveness to patients' needs. Reforms are often introduced on the local level, thus the pattern of reform varies across local government, although mimicking behaviour usually occurs.

Executive summary

Introduction

Sweden is a monarchy with a parliamentary form of government. The size of the population is about 9.4 million inhabitants and more than 80% of the population live in urban areas. The GDP per capita, measured as purchasing power parity (PPP, current international US\$), amounted to Swedish krona (SEK) 37 775 (€4200) in 2010. Life expectancy in Sweden is among the highest in the world. Diseases of the circulatory system are the leading cause of mortality, accounting for about 40% of all deaths in 2009. The second largest cause of death is cancer. There are three independent government levels – the national government, the 21 county councils/regions and the 290 municipalities. The main responsibility for the provision of health care services lies with the county councils and regions. The municipalities are responsible for care of older and disabled people.

The Swedish health care system is a socially responsible system with an explicit public commitment to ensure the health of all citizens. Three basic principles are intended to apply to health care in Sweden. The principle of human dignity means that all human beings have an equal entitlement to dignity, and should have the same rights, regardless of their status in the community. The principle of need and solidarity means that those in greatest need take precedence in medical care. The principle of cost–effectiveness means that when a choice has to be made between 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.

Organization and governance

The Health and Medical Services Act of 1982 specifies that the responsibility for ensuring that everyone living in Sweden has access to good health care lies with the county councils/regions and municipalities. The Act is designed to

give county councils and municipalities considerable freedom with regard to the organization of their health services. Local self-government has a very long tradition in Sweden. The regional and local authorities are represented by the Swedish Association of Local Authorities and Regions (*Sveriges Kommuner och Landsting* (SALAR)). The state, through the Ministry of Health and Social Affairs, is responsible for overall health care policy. There are eight government agencies directly involved in the area of health and care and public health: the National Board of Health and Welfare, the Medical Responsibility Board (HSAN), the Swedish Council on Technology Assessment in Health Care, the Medical Products Agency (MPA), the Dental and Pharmaceutical Benefits Agency (TLV), the Swedish Agency for Health and Care Services Analysis, the Swedish Social Insurance Agency and the National Institute for Public Health.

The county councils/regions are responsible for the funding and provision of health care services to their populations. The municipalities are legally obliged to meet the care and housing needs of older people and people with disabilities. There is a mix of publicly and privately owned health care facilities but they are generally publicly funded. Primary care forms the foundation of the health care system. Services for conditions requiring hospital treatment are provided at county and regional hospitals. Highly specialized care, requiring the most advanced technical equipment, is concentrated in regional hospitals. Counties are grouped into six medical care regions to facilitate cooperation regarding tertiary medical care. The responsibility for performing cross-sectoral follow-up and evaluation of national public health policies lies with the National Institute of Public Health.

Under Swedish law, health service staff must work in accordance with scientific knowledge and accepted standards of practice. Research results and comprehensive clinical experience should guide the delivery of health care. The National Board of Health and Welfare is commissioned by the government to provide evidence-based guidelines for the care and treatment of patients with serious chronic illness. The guidelines are produced in collaboration with other actors, most importantly the Swedish Council on Technology Assessment in Health Care, the MPA and the TLV.

There is no specific law regulating patients' rights in Sweden, although such a law is under development. Hitherto, different rights for patients – such as patient choice or the right to information and a second opinion – are incorporated in other legislation and are formulated in policy agreements between the state and the county councils through the SALAR.

Financing

Health care expenditure as a share of GDP was 9.9% in Sweden in 2009. Health care is largely financed by tax in Sweden. About 80% of all expenditures on health are public expenditures. Both the county councils and the municipalities levy proportional income taxes on the population to cover the services that they provide. The county councils and the municipalities also generate income through state grants and user charges. About 4% of the population have VHI, in most cases paid for by their employer. Funding from VHI constitutes about 0.2% of total funding.

About 17% of total funding of health expenditures is private expenditure, predominantly user charges. User charges for health care visits and per bed-day are determined by individual county councils and municipalities. In 2011, the fee for consulting a physician in primary care varied between SEK 100 and SEK 200 (€11–22). The fee for consulting a specialist at a hospital varied between SEK 230 and SEK 320 (€25–35). Patients are charged about SEK 80 (€9) per day of hospitalization. In almost all county councils, patients under 20 years of age are exempt from user charges. The government regulates high-cost protection schemes that cover health care outpatient visits. The national ceiling for out-of-pocket (OOP) payments means that an individual will never pay more than SEK 1100 (€122) for health care visits within a period of 12 months. Co-payments for prescribed drugs are uniform throughout the country and fully regulated by the government. The patient pays the full cost for prescribed drugs up to SEK 1100 (€122), after which level the subsidy gradually increases to 100%. The maximum co-payment for prescribed drugs within a 12-month period is SEK 2200 (€244). For over-the-counter (OTC) drugs and prescription drugs that are not subject to reimbursement, patients pay the full price.

There are three types of subsidies for dental services. Dental services for individuals up to 20 years of age are free of charge. A fixed general annual subsidy of between SEK 150 and SEK 300 (€16–33), depending on the age of individuals, is paid for preventive dental care and general examinations for people aged 20 and over. For other dental care services, there is a separate high-cost protection scheme for each 12-month period. Patients pay the full cost up to SEK 3000 (€333) and then get the following subsidy: 50% of costs for services with a price between SEK 3000 and SEK 15 000 (€1667) and 85% of costs for services with a price above SEK 15 000 (€1670).

The mechanisms for paying providers vary among the county councils, but payments based on global budgets or a mix of global budgets, case-based and performance-based payment are commonly used in hospitals. Payment to

primary care providers is generally based on capitation for registered patients, complemented with fee-for-service and performance-based payments. Most health workers across both public and private providers and independent of service sector (hospitals, primary care providers, nursing homes and home care services) are salaried employees. The county councils pay the full cost for all inpatient drugs. For reimbursed prescription drugs, the county councils receive a government grant that is negotiated at central level between the SALAR and the government.

Physical and human resources

There were about 25 500 hospital beds in Swedish hospitals in 2009, with slightly more than 4400 in specialized psychiatric care and about 20 000 in specialized somatic care in county council hospitals, and about 1100 in private hospitals. The number of acute care hospital beds was 2.2 per 1000 population in 2005, which is below the EU average (3.97) during the same year. As in many other countries, the number of hospital beds per capita in Sweden has fallen since the 1970s following structural changes in the health care sector.

Sweden allocates more human resources to the health sector than most other OECD countries. In 2008, Sweden had 3.7 practising physicians per 1000 population, compared to an EU average of 3.3. Also, the number of practising nurses per 1000 population of 10.8 was above the EU average of 7.9. In 2008, there were about 35 000 registered physicians (non-retired) and 115 000 registered nurses (non-retired) in Sweden working in the county council, municipal and private sectors. About 70% of all physicians have a specialist degree. Almost a quarter of these specialist physicians are specialists in general medicine, a low level compared to most other countries. Medical education is entirely financed by the state. The training of doctors, nurses, dentists and other medical staff is linked to the university hospitals and other relevant parts of the medical services. The National Board of Health and Welfare is the licensing authority for health care staff.

Provision of services

Most of the work in public health as well as other health-related work is carried out at regional and local levels in Sweden. The county councils manage the health care services while the municipalities manage areas such as compulsory

and upper secondary education, pre-school, care for older people, roads and water, waste and energy. Sweden adopted a national public health policy in 2003, which states that public authorities should be guided by 11 objectives, covering the most important determinants of population health.

Since 2005, there has been a new care guarantee in Sweden, which aims at strengthening the patient's position, improving accessibility and ensuring equal access to elective care in different parts of the country. The guarantee is based on instant contact (zero delay) with the health care system for consultation; seeing a general practitioner (GP) within seven days; consulting a specialist within 90 days; and waiting for no more than 90 days after being diagnosed to receive treatment. From July 2010, the guarantee is regulated by law and includes all elective care in the county councils.

One important aim behind structural changes in Swedish health care since the 1990s has been a shift from hospital inpatient care towards outpatient care at hospitals and primary care facilities, respectively. Primary care, delivered by more than 1100 public and private primary care units throughout the country, involves services that do not require advanced medical equipment and is responsible for guiding the patient to the right level within the health system. For conditions requiring hospital treatment, medical services are provided at about 70 public hospitals at the county level and 6 private hospitals. Specialized somatic care involves health care services requiring medical equipment or other technologies that cannot be provided in the primary care setting. A relatively large proportion of the resources available for medical services has been allocated to the provision of care and treatment at hospital level. About two-thirds of the county hospitals are acute care hospitals, where care is offered 24/7 and a larger number of clinical expert competences are represented than in local hospitals with more limited acute services. There is one private acute care hospital in the country. Several local hospitals have been transformed into specialized hospitals since the mid 1990s, offering elective treatments to a wider geographical area, but with no general acute services. Highly specialized care is provided at the seven public university hospitals.

There are about 1200 pharmacies throughout the country, distributing prescription and non-prescription drugs to the population and to hospitals and other health services. Following re-regulation of the pharmacy market in 2009, the number of pharmacies has increased by 20% and a handful of competing national chains dominate the market. Selected OTC products have been widely available in licensed shops since 2009.

Principal health reforms

Reforms in Swedish health care are often introduced by local authorities in the form of county councils and municipalities. This means that the pattern of reform varies across local government, although mimicking behaviour usually occurs. During the past 10 years, reforms initiated by individual county councils have focused on developing primary care and coordinated care for older people. The number of private primary care providers has increased substantially, although public ownership of health centres is still the norm in most county councils. In parallel, restructuring of the hospital sector, involving specialization and concentration of services that were initiated in the 1990s, has continued. The governance and management of services have increasingly come to focus on comparisons of quality and efficiency.

Reforms initiated at the national level have focused on the responsibilities of county councils and municipalities, more direct benefits for patient groups and regional equality of services. Key national reforms since the late 1990s have aimed at shortening waiting times for services. A new waiting-time guarantee was introduced in 2005 and has been regulated by law since 2010. Several national reforms have also aimed to improve primary care, psychiatric care and coordination of care for older people. Since 2002, the TLV has had the responsibility of deciding if a prescription drug should be subsidized and included in the reimbursement scheme, based on information about the cost-effectiveness of various products. Mandatory generic substitution by pharmacists has applied to prescriptions since 2002.

Seven overall themes or areas have guided new initiatives since 2000:

- continued specialization and concentration of services within the hospital sector;
- regionalization of health care services including mergers between county councils;
- improved coordinated care, particularly for older people;
- more choice of provider, competition and privatization to support the development of primary care;
- privatization and competition in the pharmacy sector;
- changes in subsidies and co-payments for pharmaceuticals and in particular dental services;

- increased attention to public comparisons of quality and efficiency indicators, the value of investments in health care and increased responsiveness towards expectations from patients and citizens.

Several recent initiatives and many under discussion are guided by an emerging performance paradigm in the governance and management of health care. Key words related to the current and expected future trend are national quality registers, public comparison of quality and efficiency across local authorities and providers, value for money invested in health care, health outcomes and benefits from the patient perspective, process orientation and coordinated services. More attention is being paid to the need to establish valid performance indicators and to increase abilities to monitor performance on a regular basis by investments in registers and new information technology (IT) solutions. As a result of increased transparency, more attention is also directed towards differences in results and outcomes across regions and providers, and the learning opportunities that such differences provide. The specialization and concentration of specialist services initiated in the mid 1990s have continued. An important obstacle is the preference for local production across county councils, local hospitals and, not least, specialists themselves. Concentration of services to the regional hospitals is not always supported by outcome data available in the national quality registers. An emerging issue is the long-run financing of health care services. The prognosis shows increased demand because of rapid changes with more older people over the next 10 to 15 years. There is no political support for any major changes in the financing of health care.

Assessment of the health system

Average life expectancy at birth in Sweden is among the highest in the world and has improved by 5.5 years over the last 30 years. Also, in terms of amenable mortality, Sweden consistently ranks among the best OECD countries. Swedish health care also performs well compared to other countries with respect to disease-oriented indicators of health service outcomes and quality of care. The Achilles' heel of Swedish health care has been the long waiting times for diagnosis and treatment in several areas. A number of initiatives at both national and local level have been implemented to reduce waiting times and improve access to providers. To improve access to diagnosis and treatment continues to be a key policy objective among both national and local politicians in order to improve the responsiveness to patients' needs and maintain the legitimacy of the publicly financed health system.

In the past, regional equity and equity across socioeconomic groups in terms of quality of care was more or less taken for granted. As public comparison of indicators reflecting quality and efficiency across county councils and providers has revealed significant differences, this ideal has been challenged. Regional comparisons across county councils also suggest significant room for improvement, although Swedish health care performs well on average compared to most other countries. The regional comparisons of health care quality and efficiency (*Öppna jämförelser*), conducted annually since 2006, have been instrumental in this development.

Increased attention has also been paid to the rather low level of investments in primary care and the possible detrimental effect on equity of access to services. In practice, priorities have been heavily influenced by past investments in health care, which have favoured hospital-based care. Policies have also been introduced at the national level to support the development of primary care, care for older people and psychiatric care. Mechanisms to support evidence-based and cost-effective vertical priorities have been introduced only in the last two decades. Although both the guidelines from the National Board of Health and Welfare and the systematic reviews by the Swedish Council on Technology Assessment in Health Care are based on evidence-based principles and include data on cost-effectiveness, the impact at the local level is uncertain. The practice of imposing user charges for health care services and medicines without exemptions with regard to socioeconomic factors still commands little attention. The exception is for dental services, where subsidies for high-cost prosthetics for adults have increased following reports of inequity between socioeconomic groups.

Although Swedish health care ranks high in cross-country comparisons of population health, health care outcome measures and quality of care, the opposite is usually the case when it comes to technical efficiency. For specialized services, indications of poor technical efficiency are somewhat surprising since Sweden at the same time reports a low bed-rate per inhabitant and reasonably low average length of stay (ALOS). More generally, however, studies suggest that there is no significant correlation between technical efficiency (measured by output and costs) and indicators reflecting quality of care across the 21 county councils. There is, however, no simple explanation behind the variation in quality and efficiency since no county councils perform well in all respects. The county councils that perform best in terms of quality of care, access, patient safety and costs seem to have accomplished this end in different ways.

1. Introduction

Sweden is a monarchy with a parliamentary form of government. The size of the population is about 9.4 million inhabitants and more than 80% of the population live in urban areas. The GDP per capita, measured as PPP (current international US\$), amounted to SEK 37 775 in 2010. There are three independent government levels – the national government, the county councils/regions and the municipalities. The responsibility for the provision of health care services lies mainly with the county councils and regions, and to some extent with the municipalities. Health care services account for almost 90% of the county councils' activities. The municipalities are responsible for matters relating to their inhabitants and their immediate environment, such as primary and secondary education, childcare, and care of older and disabled people. There are 290 municipalities and 21 county councils/regions.

The Swedish health care system is a socially responsible system with an explicit public commitment to ensure the health of all citizens. Three basic principles are intended to apply to all health care in Sweden. The principle of human dignity means that all human beings have an equal entitlement to dignity, and should have the same rights, regardless of their status in the community. The principle of need and solidarity means that those in greatest need take precedence in medical care. The principle of cost-effectiveness means that when a choice has to be made between different health care options, there should be a reasonable relationship between the costs and the effects, measured in terms of improved health and quality of life. Life expectancy in Sweden is among the highest in the world. Diseases of the circulatory system are the leading cause of mortality, accounting for about 40% of all deaths in 2009. The second largest cause of death is cancer.

1.1 Geography and sociodemography

Sweden is situated in northern Europe, bordering Finland and Norway, and covers an area of 449 964 square km (see Fig. 1.1). The Swedish coastline (7300 km) is the longest in Europe. More than 57% of the country is covered by forest, and mountains dominate the north-western part. Due to the Gulf Stream, the climate is mild compared to other areas this far north. People are increasingly moving from the rural areas to the urban areas. The size of the population was about 9.4 million inhabitants in February 2011 and more than 80% of the population lived in urban areas (Statistics Sweden, 2011d). On average, there are 20 inhabitants per square km of land, with a high concentration of people living in the coastal regions and in the south of the country (see Table 1.1).

Fig. 1.1
Map of Sweden



Table 1.1

Trends in population/demographic indicators, 1980–2009

	1980	1990	1995	2000	2005	2008	2009
Total population	8 310 500	8 558 800	8 827 000	8 872 294	9 029 572	9 219 638	9 298 515
Female population (% of total)	50	51	51	51	50	50	50
Population aged 0–14 years (% of total)	20	18	19	18	17	17	–
Population aged 65+ years (% of total)	16	18	17	17	17	18	–
Population growth rate (%)	0.18	0.74	0.23	0.24	0.4	0.79	0.9
Average population density (per sq. km)	–	19	20	20	20	–	–
Total fertility rate (births per woman)	1.68	2.13	1.73	1.55	1.77	1.91	1.94
Birth rate, crude (per 1 000 people)	11.7	14.5	11.7	10.2	11.2	11.9	–
Death rate, crude (per 1 000 people)	11.1	11.1	10.6	10.5	10.2	9.9	–
Age dependency ratio	0.56	0.56	0.56	0.54	0.52	0.54	–
Urban population (% of total)	83	84	83	83	84	–	–

Source: WHO Regional Office for Europe, 2011.

Swedish is the main language and Swedes are the predominant ethnic group. There are two minority groups of native inhabitants in the northern part of Sweden: the Meänkielie-speaking (similar to Finnish) people of the north-east and the Sami population. In 2010, almost one-fifth of the population either had another country of birth or both parents had another country of birth than Sweden, originating mainly from the other Nordic countries, the former Yugoslavia and the Middle East (Statistics Sweden, 2011d). More than 70% of the population belongs to the Church of Sweden, which is Lutheran. The Church was separated from the state in the year 2000 (Church of Sweden, 2011).

Sweden is divided into 290 municipalities and 21 county councils/regions (including Gotland which is both a municipality and a region). The size of the population in the municipalities varies widely, from slightly more than 2500 in Bjurholm to almost 1 million in the largest city, Stockholm. The average population in each county council/region is about 424 000 inhabitants. Stockholm county is the largest with about 2 million inhabitants; whereas the smallest is Gotland, with about 57 000 inhabitants (Statistics Sweden, 2011d).

The population growth rate was 0.79% in 2010 due to a positive net birth rate (115 641 born and 90 487 deceased) and a net migration flow (98 801 immigrants and 48 853 emigrants). The fertility rate has increased during the past 10 years and was 1.98 births per woman the same year (see Table 1.1). The average life

expectancy has been rising over the last 30 years and is today 83.2 years for women and 79.1 years for men (Statistics Sweden, 2011d). Sweden has one of the world's oldest populations, with more than 18% of the population being 65 years or older (see Table 1.1) and more than 5% being 85 years or older. This ageing of Swedish society has important social and political implications, as fewer people of productive age are available to provide financial support for the increasing demands being placed on the welfare system.

In 2009, 43% of the population aged 16 and above were married and 17% were divorced. About 23% of the population lived in single-person households in 2007 (Statistics Sweden, 2009). The educational system reaches the entire population, and the literacy rate in Sweden is 99%. In 2009, 32% of the population aged 16–74 years had a university education. The corresponding figure among those aged 35–44 years was 40% (Statistics Sweden, 2009).

1.2 Economic context

The Swedish economy is based on services, heavy industries and international trade. The country's natural resources include forest, iron ore, copper, lead, zinc, silver, uranium and water power. In 2009, the agriculture, forestry and fishing sectors together accounted for less than 2% of GDP. The services sector accounted for more than 70% of GDP in the same year (see Table 1.2). Exports of goods and services amounted to 49% of GDP in 2009 (World Bank, 2011).

The Swedish economy expanded rapidly during the 1950s and 1960s, with annual GDP growth averaging 3.4% and 4.6%, respectively. This progress was halted during the 1970s, partly because of the oil crisis and tight monetary policy motivated by growing fiscal deficits. Sweden reacted to the resulting recession by adopting an expansionary economic policy, which led to high domestic inflation. The late 1980s could be described as a period of overheating. High prices and inflation rates led to a deterioration in Swedish industrial competitiveness.

During the late 1980s the credit, capital and finally currency markets were deregulated. Increased levels of borrowing combined with high prices, increasing levels of unemployment and a wave of speculation against the Swedish krona led to a deep financial crisis as well as a currency crisis at the beginning of the 1990s. When the international business climate began to weaken at the beginning of the 1990s, exports fell to 23% of GDP in 1992 (Table 1.2). As a consequence of the high unemployment rate that followed, the county councils' and municipalities' tax base was eroded at the same time

Table 1.2

Macroeconomic indicators, 1980–2009

	1980	1990	1995	2000	2005	2008	2009
GDP (current million US\$)	131 878	244 458	253 680	247 260	370 580	487 576	406 072
GDP, US\$ per capita	15 898	28 566	28 755	27 686	40 551	51 937	42 965
GDP, PPP US\$ per capita	–	–	21 911	27 726	32 298	37 424	–
GDP growth (annual %)	2	1	4	4	3	0	–5
Expense, public (% of GDP)	–	–	44.41	36.46	35.08	31.83	–
Cash surplus/deficit (% of GDP)	–	–	–7	6	1	2	–
Tax revenue (% of GDP)	–	–	21	23	20	19	–
Government debt, total (% of GDP)	–	–	85	69	53	38	–
Agriculture, value added (% of GDP)	4.70	3.77	3.02	2.06	1.24	1.76	1.74
Industry, value added (% of GDP)	31.62	30.86	30.49	28.82	28.11	27.50	25.12
Manufacturing, value added (% of GDP)	–	–	22.39	21.99	19.93	18.42	16.10
Services etc, value added (% of GDP)	63.68	65.37	66.49	69.11	70.65	70.74	73.13
Labour force, total	4 436 677	4 748 188	4 593 548	4 514 462	4 800 047	4 998 697	–
Labour force, female (% of total labour force)	45	48	48	48	47	47	–
Unemployment, total (% of total labour force)	2	2	9	6	8	6	–
Real interest rate (%)	3.10	7.33	7.19	4.30	2.54	–	–
Exports of goods and services (% of GDP)	30	30	40	47	48	53	49
Official exchange rate (LCU per US\$, period average)	4.23	5.92	7.13	9.16	7.47	6.59	7.65

Source: World Bank, 2011.

Note: LCU – local currency unit.

as their costs were increasing, leading to a pressure to restrain costs. In order to restore the Swedish economy, a broad political agreement was made on a programme in which fiscal restraint was given high priority (Palme et al., 2002). Great emphasis was also placed on the reduction of unemployment. However, the currency market remained unstable and, in 1992, Sweden introduced a floating exchange-rate system. The Swedish krona immediately depreciated by 25% and the employment decline in the export industry and import-competing sectors was eased. In the same year, the Riksbank (central bank of Sweden) adopted an explicit inflation target of 2%.

In 1995, exports of goods and services were equivalent to 40% of the GDP (see Table 1.2). During the second half of the 1990s, fiscal policies focused on public sector finances with specific goals for public sector deficit and national debt as a proportion of GDP. The Swedish targets are more ambitious than the

convergence criteria established by the EU, for example aiming for a surplus in public finances of 2% of GDP compared to the EU convergence criteria that allow a deficit of 3%.

During the beginning of the 2000s, the Swedish economy together with several other countries experienced an economic recession. During the recovery that followed, international trade increased, resulting in increased exports and a growth in GDP between 3.2% and 4.3% during 2004–2006. In 2007, the recovery began to slow down and in 2008 the global financial crisis occurred. Exports fell and the growth in GDP fell by 5.5% in 2009 – the largest drop in GDP in Sweden in modern times.

Compared to other countries Sweden performed well in response to the external shock. One major reason was that the financial crisis in the early 1990s brought forward reforms to restore fiscal sustainability and a robust monetary framework, together with a strong emphasis on improvements of the labour market and social policies. Thus, Sweden entered the 2008 crisis with strong institutions and fundamentals. The government debt decreased from 69% to 38% of GDP between 2000 and 2009, partly as a result of privatizations of previously publicly owned companies (Ekonomifakta, 2011). In addition, Sweden responded to the 2008 crisis with structural reforms such as an increase in the earned-income tax credit which led to positive effects on the demand side in the short run and the supply side of the economy in the longer run (OECD, 2011). Moreover, credibility in the financial sector was maintained through government programmes to support lending either by providing funding or by issuing lending guarantees.

In 2010, GDP rose by 5.5%. The GDP per capita, measured as PPP (current international US\$), amounted to SEK 37 775 in 2010. In the 2010 United Nations Human Development Index, Sweden was ranked in ninth place (United Nations, 2010). The share of income among the wealthiest 10% of the population was 22% in 2000, and the corresponding figure for the poorest 10% of the population was 4% (World Bank, 2011).

In 2008, employment rates were at levels comparable to those before the crisis in the early 1990s. The upward trend came to an end, however, in 2009 due to the global financial crisis. In 2010, employment rates have begun to rise again, primarily in the private sector. The number of people in the workforce (labour supply) in Sweden amounted to nearly 5 million in 2010. This corresponds to 70.7% of the population aged 15–74 years. The workforce participation among people older than 60 years is higher in Sweden compared to most other countries. The participation rate was 61% among 60–65-year-olds

and 12% among 65–69-year-olds in 2006/2007. Female participation in the workforce is also high in Sweden. About 47% of the total workforce was women in 2008. The unemployment rate was 8.4% in 2010, but it shows a downward trend and was 7.6% in February 2011 (seasonally adjusted) (Statistics Sweden, 2011a; Eurostat, 2010).

1.3 Political context

Sweden is a parliamentary democracy that is governed at the national, regional, local and European level. General elections at the national (parliamentary), regional and local levels are held every four years. In the elections, political parties are elected to represent the citizens in the three political assemblies, that is, the municipal, county council or regional assembly and the national parliament (Riksdag). 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 county council/regional elections, individuals are required to be at least 18 years of age and a resident of the municipality and county concerned for the past three years. In the 2010 national election, election participation was almost 85% (Election Authority, 2011).

At the national level, the Swedish people are represented by the Riksdag, which is the supreme political decision-making body in Sweden with 349 seats. The government implements the Riksdag's decisions and draws up proposals for new laws or law amendments. The Riksdag appoints the Prime Minister, who is requested to form a government. The government is assisted in its work by the government offices, comprising a number of ministries and some 300 central 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 law and the guidelines laid down by the government. The work and results are, however, monitored and evaluated by the government.

The political parties are usually divided into a centre-right-wing bloc and a centre-left-wing bloc in Sweden. The centre-right-wing bloc is made up of the Centre Party, the Liberal Party, the Moderate Party and the Christian Democrats. The centre-left-wing bloc consists of the Social Democrats and the Left Party. The Green Party has traditionally been regarded as belonging to the centre-left-wing bloc, but in some areas the party holds the balance of power and may support either bloc on a particular issue. Since the 2010

election the Sweden Democrats, a far-right nationalist party, is also represented in the parliament. Since 2006, Sweden has been governed at the central level by Moderaterna and the Alliance for Sweden, a centre-right-wing bloc including the four above-mentioned political parties. In 2010, the coalition was re-elected for another four years, although they had to form a minority government. Prior to the election in 2006, Sweden had been governed by the Social Democrat Party, primarily supported by a left-wing majority since the 1930s, except for the periods 1976–1982 and 1991–1994.

With respect to governance indicators, Sweden was ranked between 95% and 99% for the indicators Voice and Accountability, Government Effectiveness, Regulatory Quality, Control of Corruption and Rule of Law in both the 2004 and 2009 measurements. The indicator Political Stability and Lack of Violence/Terrorism was ranked at 88% in 2009 since government stability was affected by the fact that there is a minority government in power (World Bank, 2010).

Municipal and county council assemblies are the highest decision-making bodies at the local and regional levels. All assembly meetings are open to the public. The possibility of decision-making based on regional and local conditions is known as local self-government and is enshrined in the Swedish constitution. Compared to other EU member states, Swedish municipalities and county councils have wide-ranging responsibilities. Municipalities and county councils exist on an independent basis, that is, county councils are not superior to municipalities.

The Local Government Act, which came into force in 1992, defines the roles of municipalities and county councils. Both municipalities and county councils are entitled to levy proportional income taxes in order to finance their activities. The average, overall local tax rate is 30%, where approximately 20% goes to the municipalities and 10% to the county councils. The remainder of local authority income is generated through state grants and fees paid by the citizens for various services. 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 guarantee all municipalities and county councils equal economic conditions for their activities.

At the regional level, there are 17 county councils and 4 regional bodies (Västra Götaland, Skåne, Halland and Gotland), called regions. Political tasks at this level are undertaken by the county councils/regions. At this level, there is also an appointed governor (*landshövding*) with a county administrative board (*länsstyrelse*) which is the regional representative of the national

government. Each county council/region is directly elected by the people within its geographical boundaries. The political parties governing the different county councils/regions vary throughout the country. There is a long tradition of political consensus at the local and regional levels, and it is common for parties to cooperate and form majorities across bloc boundaries. The main responsibility of the county councils and regions is health care, which accounts for almost 90% of their activities. Other responsibilities are public transport, growth and regional development, where the four regional bodies mentioned above have extended responsibilities compared to the county councils.

At the local level, there are 290 municipalities (including Gotland). Each municipality has an elected assembly – the municipal council – which makes decisions on municipal matters. The municipal council appoints the municipal executive board, which leads and coordinates municipality work. The municipalities are responsible for matters relating to their inhabitants and their immediate environment, such as primary and secondary education, childcare, and care of older and disabled people. Moreover, they are responsible for water supply, sewerage and streets, spatial planning, rescue services and waste disposal.

Sweden has been a member of the EU since 1995. As a member of the EU, Sweden implements EU regulations and takes part in the decision-making process when new joint rules are to be drawn up and adopted. In a referendum in 2003, the Swedish people rejected participation in European Monetary Union, and all parliamentary parties pledged to respect the outcome of the referendum.

1.4 Health status

The Swedish health care system is a socially responsible system with an explicit public commitment to ensure the health of all citizens. Quality health care for all is a cornerstone of the Swedish welfare state. The 1982 Health and Medical Services Act not only incorporated equal access to services on the basis of need, but also emphasizes a vision of equal health for all. Three basic principles are intended to apply to health care in Sweden. The principle of human dignity means that all human beings have an equal entitlement to dignity, and should have the same rights, regardless of their status in the community. The principle of need and solidarity means that those in greatest need take precedence in medical care. The principle of cost–effectiveness means that when a choice has to be made between 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 overarching aim of national public health policy in Sweden is to create social conditions that will ensure good health, on equal terms, for the entire population. The national public health policy is based on 11 public health objective domains, covering the most important determinants of Swedish public health and by which all public authorities at all levels should be guided (see section 2.6). The Swedish National Institute of Public Health, which is a government agency, has the responsibility for monitoring and evaluating progress. The 11 public health objectives are (Swedish National Institute of Public Health, 2011):

1. participation and influence in society
2. economic and social prerequisites
3. conditions during childhood and adolescence
4. health in working life
5. environments and products
6. health-promoting health services
7. protection against communicable diseases
8. sexuality and reproductive health
9. physical activity
10. eating habits and food
11. tobacco, alcohol, illicit drugs, doping and gambling.

Life expectancy in Sweden is among the highest in the world – 83.2 years for women and 79.1 years for men in 2010 (Statistics Sweden, 2011d; see also Table 1.3). During the past 30 years, the average life expectancy rose by 5.5 years, and Sweden currently has one of the world's oldest populations. The age when having the first child increased steadily from the 1970s, but has been stable since 2004 and was 29 years for mothers and 31 years for fathers on

Table 1.3
Mortality and health indicators, 1980–2008

	1980	1990	1995	2000	2005	2008
Life expectancy at birth, in years	75.87	77.77	79.07	79.92	80.82	81.35
Life expectancy at birth, in years, male	72.85	74.93	76.34	77.51	78.57	79.29
Life expectancy at birth, in years, female	79.06	80.65	81.78	82.26	82.99	83.36
Mortality rate, adult, male (per 1 000 male adults)	76.33	65.74	58.91	56.20	51.09	–
Mortality rate, adult, female (per 1 000 female adults)	141.94	114.45	99.46	87.19	76.93	–

Source: World Bank, 2011.

average during the period 2005–2009 (National Board of Health and Welfare, 2009a). In 2002, the disability-adjusted life expectancy in Sweden was 73.3 years compared to an estimated life expectancy of 80.4 years.

The number of deaths in 2009 was 90 177, of which 52% were women. The total death rate was 994 per 100 000 women and 946 per 100 000 men. More than 70% of all deaths occurred among people aged 75 years or older (National Board of Health and Welfare, 2011c).

There are two major causes of death in Sweden (Table 1.4). Mortality and morbidity due to diseases of the circulatory system has been significantly reduced during the last 30 years and this is one of the major causes contributing to the rise in life expectancy. This reduction has been achieved through both preventive measures, for example a reduction in the number of daily smokers and high cholesterol, as well as improved treatment methods. Diseases of the circulatory system are, however, still the most common cause of death for both women and men, being the underlying cause in 37% of all deaths among women and 40% of all deaths among men in 2009. In 1987, the death rate due to diseases of the circulatory system per 100 000 women aged 15–74 years was 128 compared to 59 in 2009, which is a decrease of more than 50%. Among men the corresponding decrease was more than 60% (National Board of Health and Welfare, 2011c).

Table 1.4

Main causes of death, 1980–2008

	1980	1990	1995	2000	2005	2008
Communicable diseases						
Infectious and parasitic disease, all ages per 100 000	5.42	4.73	5.31	6.41	8.09	9.40
Tuberculosis, all ages per 100 000	–	0.81	0.84	0.41	0.33	0.31
Non-communicable diseases						
Diseases of circulatory system, all ages per 100 000	433.26	339.74	295.93	255.30	212.05	195.61
Ischaemic heart disease, all ages per 100 000	288.53	185.80	158.07	123.81	100.99	89.97
Malignant neoplasms, all ages per 100 000	184.10	166.20	161.29	157.05	154.52	146.96
Diseases of the respiratory system, all ages per 100 000	45.32	48.52	44.84	39.32	34.37	31.39
Malignant neoplasm female breast, all ages per 100 000	27.75	25.30	24.78	23.56	22.29	20.89
Mental disorder and disease of nervous system & sense organ, all ages/100 000	18.79	28.83	28.95	37.27	41.17	42.68
Diabetes, all ages, per 100 000	14.05	11.31	11.04	11.21	11.94	11.66
External causes						
Suicide and self-inflicted injury, all ages per 100 000	19.04	15.88	14.21	11.60	12.35	11.62
Transport accidents, all ages per 100 000	–	10.09	6.39	6.53	5.10	4.46
Motor vehicle traffic accidents, all ages per 100 000	10.37	8.16	5.26	5.81	4.45	3.93

Source: WHO Regional Office for Europe, 2011.

The second most common cause of death is neoplasm (cancer), corresponding to 23% of all deaths among women and 27% among men in 2009. Of all deaths due to cancer, breast cancer was the most common form among women until 2005. But programmes and treatments to prevent mortality due to breast cancer have been successful, resulting in a decrease from 32.8 to 25.9 deaths per 100 000 inhabitants between 1993 and 2009. Deaths due to lung cancer have increased considerably among women since the late 1980s and lung cancer is now the most common form of cancer causing death among women. Among men, lung cancer decreased during the same period. Prostate cancer is the most common cancer among men. Stomach cancer mortality has decreased by about half in both women and men during the past 20 years (National Board of Health and Welfare, 2011c).

Mortality due to respiratory illness has decreased since the late 1980s. The exception is deaths due to chronic obstructive pulmonary disease among women, which was 84% higher in 2009 than in 1987. Deaths due to mental illness and diseases of the nervous system have increased during the past 20 years in both men and women. The mortality rate for dementia was almost four times as high in 2009 as in the late 1980s (National Board of Health and Welfare, 2011c).

Programmes designed to prevent accidents have been successful in Sweden. Deaths due to road traffic accidents have been continuously reduced since the 1970s. In 1997, the Swedish government adopted the so-called “zero-vision”, aspiring to no deaths or serious injuries caused by traffic. The number of traffic-related deaths decreased from 16.2 to 3.8 deaths per 100 000 inhabitants between 1970 and 2009. Sweden has the world’s lowest rate of mortality due to road traffic accidents among children aged 0–17 years (Swedish Transport Administration, 2011).

Work-related injuries and deaths have also been significantly reduced during the past 50 years. The decrease has been most prominent in the transport and construction sectors. In 2010, 54 work-related deaths occurred in Sweden (Swedish Agency for Work Environment, 2011).

Restrictive programmes and interventions against smoking, alcohol and drugs have been successful in some cases. The number of daily smokers has decreased substantially during the past 30 years. The reduction has been more prominent among men than among women. In 2005, the proportion of daily smokers was 14% among men and 18% among women (National Board of Health and Welfare, 2009a). The proportion of daily smokers among men in Sweden is lower than in any other European country. The reduction in the number of daily smokers has been achieved partly by the adoption of non-smoking campaigns and tax increases on tobacco. Another reason for the reduction in smoking is that many ex-smokers have turned to smokeless tobacco (oral snuff).

The consumption of alcohol has increased since the 1990s. In spite of the increase, alcohol consumption in Sweden is among the lowest in Europe. In younger age groups consumption is, however, in line with other countries in the EU. Also the number of drug abusers is low in Sweden from an international perspective (less than 2 per 1000 inhabitants) (National Board of Health and Welfare, 2009a).

In the report on public health and social conditions from 2004, worrying tendencies were identified in the areas of self-reported mental illness, alcohol-related problems and being overweight (National Board of Health and Welfare, 2004a). The proportion of people stating that they suffer from worry, fear or anxiety had increased within all age groups, and the increase was most prominent in urban areas and among single mothers. Suicides and alcohol-related mortality had been continuously decreasing for more than 15 years, but both reported anxiety and alcohol consumption increased during 2001, according to the report. The tendency towards lower mortality from suicides and alcohol-related injuries appears to have stopped and has remained at stable levels for the past 10 years (Tables 1.4 and 1.5). Drug-related mortality, however, has been reduced during the 2000s. According to the latest report on public health and social conditions (National Board of Health and Welfare, 2009a), worrying tendencies regarding mental health continue, especially among young women. Although mortality from suicides has remained at a stable level, attempts to commit suicide have increased. Moreover, treatment for depression has increased among young women.

Table 1.5

Morbidity and factors affecting health status, 1980–2008

	1980	1990	1995	2000	2005	2008
Selected alcohol-related causes of death, per 100 000	–	79.94	64.41	49.99	51.69	49.22
Pure alcohol consumption, litres per capita, age 15+	6.74	6.41	6.20	6.01	6.60	–
Selected smoking-related causes of death, per 100 000	–	299.16	264.03	228.14	195.45	179.98
% of regular daily smokers in the population, age 15+	32.40	25.80	22.80	18.90	15.90	13.70
Cancer incidence per 100 000	421.27	474.32	474.23	512.63	564.74	558.89
Decayed, missing or filled teeth at age 12 (DMFT-12 index)	–	2.00	1.40	1.00	1.00	0.90

Source: WHO Regional Office for Europe, 2011.

In the report from 2004, it was also pointed out that excess weight and obesity had become more common in all socioeconomic groups since the beginning of the 1980s, especially among people with a low level of education and among young adults. This development seems to have been halted among both children and adults according to the latest report in 2009. Consumption of fruit and vegetables has increased, whereas the consumption of sweets,

crisps and soft drinks has decreased in younger age groups. The proportion of overweight people is, however, almost 50% of the population aged 16–84 years although only 10% are obese (National Board of Health and Welfare, 2009a).

The dental status of the Swedish population has generally improved during the past two decades, particularly among children. Among 12-year-olds the average number of decayed, missing or filled teeth (DMFT-12 index) was one in 2005 compared to three in 1985. The corresponding decrease among 19-year-olds was from eight to three decayed, missing or filled teeth. There is no difference in dental status between boys and girls. There are however differences with respect to socioeconomic background both among children and adults. People with another country of origin than Sweden, lower-income groups and single parents are less likely to make regular dentist visits and are more likely to have worse dental status (National Board of Health and Welfare, 2009a).

From an international perspective the conditions for health promotional work in the area of sexual and reproductive health are good in Sweden. The subject has been a compulsory part of the tutorial plan in primary school for over 50 years. Moreover, there are more than 220 youth clinics throughout the country, offering support and birth control, which are free of charge. Prevention efforts against sexually transmitted diseases were successful during the 1980s and in the first half of the 1990s. Sweden, together with Finland has the lowest prevalence of HIV/AIDS in western Europe. However, since the second half of the 1990s, the number of reported cases of chlamydia infection, gonorrhoea and syphilis increased, especially among younger people. Chlamydia is the most common sexually transmitted infection in Sweden and the number of reported cases of infection tripled during the past 10 years (National Board of Health and Welfare, 2009a).

The use of contraceptives varies in different groups. According to a recent survey among young adults, about four-fifths of people aged 15–24 years used contraceptives (National Board of Health and Welfare, 2008b). In another recent survey among 15 000 respondents aged 15–29 years, it was found that about half use a condom when having sex with a new partner (Tikkanen, Abelsson & Forsberg, 2011). About a quarter of all pregnancies in the 15–44 age group ended in abortion during 2006. This figure has been fairly stable since the mid 1970s, although abortions have become more common in younger age groups, that is, those aged 15–19 years. More than 90% of all abortions are carried out before 12 weeks of pregnancy. Prior to the abortion law, adopted in 1974, more than half of all abortions were carried out later than week 12 of pregnancy, which is associated with a greater risk of complications (National Board of Health and Welfare, 2009a).

All women are offered regular health checks, screening, psychological support and education throughout their pregnancy, and almost all women participate in the programme. Special attention is given to identifying and helping women who are socially vulnerable – at risk of violence for example. Maternal and child mortality is among the lowest in the world. About 100 000 babies are born every year and about 75% of the childbirths are free of complications (National Board of Health and Welfare, 2009a). Sweden has one of the lowest infant and maternal mortality rates in the world; in 2008 it had an infant mortality rate of 2.49 per 1000 live births (Table 1.6).

Table 1.6

Maternal, child and adolescent health indicators, 1980–2009

	1980	1990	1995	2000	2005	2008	2009
% of all live births to mothers, aged under 20 years	4.48	3.14	2.07	1.94	1.70	1.64	–
% of all live births to mothers, aged 35+ years	8.44	11.57	13.41	16.73	20.05	21.17	–
Abortions per 1000 live births	359.42	302.48	304.29	342.54	345.13	348.15	–
Abortions/1000 live births, aged under 20 years	1 418.41	1 745.31	1 960.28	2 969.27	4 035.47	4 221.66	–
Abortions/1000 live births, aged 35+ years	969.72	493.62	442.23	424.71	367.73	330.25	–
Infant deaths per 1000 live births	6.90	5.96	4.03	3.42	2.45	2.49	–
Neonatal deaths per 1000 live births	4.93	3.50	2.78	–	1.50	1.77	–
Maternal deaths per 100 000 live births	8.24	3.23	3.87	4.42	5.92	5.49	–
Syphilis incidence per 100 000	4.04	1.67	0.78	1.12	1.21	1.87	–
Gonococcal infection incidence per 100 000	188.89	9.81	2.79	6.65	7.65	7.86	–
% of children vaccinated against measles	63.00	94.70	96.50	94.20	95.40	96.20	96.70
% of infants vaccinated against poliomyelitis	96.00	99.20	99.40	99.00	98.70	98.30	98.40

Source: WHO Regional Office for Europe, 2011.

All children are recommended to take part in the general immunization programme, which is free of charge. The general programme includes vaccination against 10 diseases. Diphtheria, tetanus and pertussis are given three times in infancy, with a booster vaccination at 5–6 years of age and a second booster vaccination at 14–16 years of age. Polio, haemophilus influenzae type B infection (Hib) and pneumococcal infection are given three times in infancy, with a booster vaccination against polio at 5–6 years of age. Vaccinations against measles, mumps and rubella are given during the second year of life and a booster vaccination at 6–8 years of age. Vaccination against human papilloma virus has also been included in the general programme since 2010, and will be given three times to all girls (born in 1999 or later) at 10–12 years of age. Children who are at high risk of infection are also offered vaccination against tuberculosis and hepatitis B. The vaccination coverage rate is close to 100% for diphtheria, tetanus, pertussis, Hib, polio, measles, rubella and mumps (Swedish Institute for Infectious Diseases, 2011).

Although the great majority of citizens in Sweden experience good and improving health, according to the latest report on public health and social conditions there are some worrying tendencies regarding unequal distribution of health (National Board of Health and Welfare, 2009a):

- Diseases of the circulatory system and diabetes are more common among people with low education.
- The number of daily smokers is decreasing in all groups of the population except among women with low education.
- Survival rates from breast cancer are lower in women with low education.
- Severe pain and bad health in general is more common in people with lower income.
- Single mothers suffer to a higher extent from problems with pain, worry, fear and anxiety, are daily smokers to a higher degree and are more obese than other groups.
- Problems with asthma and allergies are more common and more severe in children in lower socioeconomic groups.
- Dental health is worse in people with low income.
- Single women are more likely to suffer from domestic violence than other women. Also women with functional impairments and older women are more likely to suffer from violence.
- Informal care from relatives is more common among people with low education. People with high income purchase such services to a greater extent.
- People with low income to a much higher extent refrain from actually purchasing their prescribed medicines at the pharmacy. Single mothers are three times more likely not to get their prescribed medicines compared to the population in general.

Great emphasis has been put on reducing regional differences and inequalities with respect to socioeconomic factors in the area of health since the beginning of the 2000s. For several years, the SALAR has been engaged in projects highlighting differences in health based on gender. Since 2010, other factors have received additional focus with respect to reducing inequalities in health, such as education, income and country of birth (National Board of Health and Welfare, 2011a). Information campaigns have been carried out and funds have been allocated to initiatives and collaborations aimed at reducing inequalities. The work by the National Board of Health and Welfare on evidence-based guidelines for the care and treatment of patients with serious chronic illness is one important example (see section 2.4).

2. Organization and governance

The Swedish health care system is organized into three levels: the national, regional and local. The Health and Medical Services Act of 1982 specifies that the responsibility for ensuring that everyone living in Sweden has access to good health care lies with the county councils/regions and municipalities. The Act is designed to give county councils and municipalities considerable freedom with regard to the organization of their health services. The state, through the Ministry of Health and Social Affairs, is responsible for overall health care policy. There are eight government agencies directly involved in the area of health care and public health: the National Board of Health and Welfare, the HSAN, the Swedish Council on Technology Assessment in Health Care, the MPA, the TLV, the Swedish Agency for Health and Care Services Analysis, the Swedish Social Insurance Agency and the National Institute for Public Health.

The 17 county councils and 4 regional bodies are responsible for the funding and provision of health care services to their populations. The 290 municipalities are legally obliged to meet the care and housing needs of older people and people with disabilities. There is a mix of publicly and privately owned health care facilities but they are generally publicly funded. Primary care forms the foundation of the health care system and there are over 1100 primary care units throughout the country. There are about 70 hospitals at the county level. Highly specialized care, requiring the most advanced technical equipment is concentrated in the seven regional/university hospitals. Counties are grouped into six medical care regions to facilitate cooperation regarding tertiary medical care. Responsibility for performing cross-sectoral follow-up and evaluation of Sweden's national public health policy lies with the National Institute of Public Health.

Local self-government has a very long tradition in Sweden. The regional and local authorities are represented by the SALAR. Decentralization of responsibilities within the Swedish health care system refers not only to relations between central and local government, but also to decentralization within each county council. During the latter part of the 1990s and the 2000s there have been efforts towards strengthening national influence again, partly driven by the need to better coordinate care and to reduce regional differences.

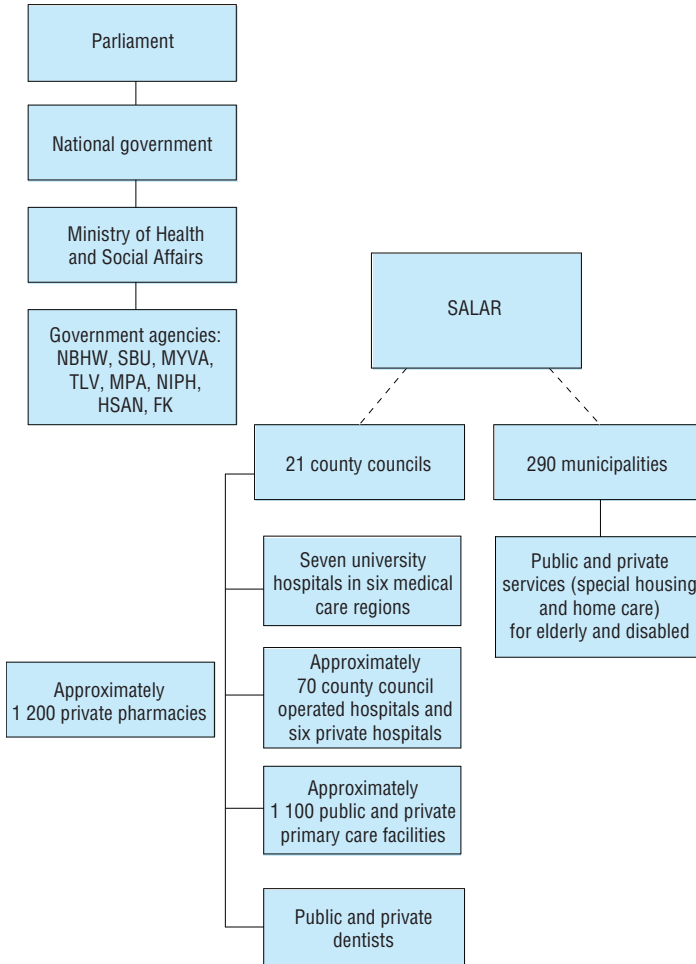
Under Swedish law, health service staff must work in accordance with scientific knowledge and accepted standards of practice. Research results and comprehensive clinical experience should guide the delivery of health care. The National Board of Health and Welfare is commissioned by the government to provide evidence-based guidelines for the care and treatment of patients with serious chronic illness. The guidelines are produced in collaboration with other actors, most importantly the Swedish Council on Technology Assessment in Health Care, the MPA and the TLV.

There is no specific law regulating patients' rights in Sweden, as opposed to other Nordic countries. Instead, different rights for patients, such as patient choice or the right to information, are incorporated in other legislation and are formulated in policy agreements between the state and the county councils through the SALAR. Implementation of patient choice of provider has been introduced gradually since the 1990s.

2.1 Overview of the health system

Health care and other welfare services are considered a public responsibility in Sweden. The Swedish health care system is organized into three levels: the national, regional and local (Fig. 2.1). According to the Swedish Health and Medical Services Act of 1982: "Health and medical services are aimed at assuring the entire population of good health and of care on equal terms. Care shall be provided with due respect for the equal worth of all people and the dignity of the individual. Priority shall be given to those who are in the greatest need of health and medical care". The responsibility for health care services is divided between the state, county councils/regions and municipalities. The Health and Medical Services Act specifies that the responsibility for ensuring that everyone living in Sweden has access to good health care lies with the county councils/regions and municipalities. The Act is designed to give county councils and municipalities considerable freedom with regard to the

Fig. 2.1
Overview of the health system



Notes: NBHW – National Board of Health and Welfare; MYVA – Swedish Agency for Health and Care Services Analysis, NIPH – National Institute for Public Health; FK – Swedish Social Insurance Agency.

organization of their health services. The state, through the Ministry of Health and Social Affairs (*Socialdepartementet*), is responsible for overall health care policies.

There are eight government agencies directly involved in the area of health, medical care and public health: the National Board of Health and Welfare, the Swedish Council on Technology Assessment in Health Care (SBU), the HSAN,

the MPA, the TLV, the Swedish Agency for Health and Care Services Analysis, the National Institute for Public Health and the Swedish Social Insurance Agency (see section 2.3.1 *National level*).

The 17 county councils and 4 regional bodies are responsible for the funding and provision of health care services to their populations. The 290 municipalities are legally obliged to meet the care and housing needs of older people and people with disabilities. In the Social Services Act of 1980, it is explicitly stated that older people have the right to receive public services and help at all stages of life. People with disabilities are entitled to support not only under the Social Services Act but also under special legislation. The Act Concerning Support and Service for People with Certain Functional Impairments of 1993 regulates support for items such as personal assistance and daily activities.

There is a mix of publicly and privately owned health care facilities but they are generally publicly funded. Primary care forms the foundation of the health care system and there are over 1100 primary care units throughout the country. In contrast to many other countries, however, primary care has no formal gate-keeping function in a majority of the county councils. There are about 70 hospitals at the county level. Highly specialized care, requiring the most advanced technical equipment, is concentrated to the seven regional/university hospitals. Counties are grouped into six medical care regions to facilitate cooperation regarding tertiary medical care (see sections 5.3–5.5). The responsibility for performing cross-sectoral follow-up and evaluation of the national public health policy lies with the National Institute of Public Health (*Folkhälsoinstitutet*).

2.2 Historical background

The present structure of the Swedish health care system reflects a long history of public funding and ownership, together with the growing importance of local self-government. Developments until the late 1960s were characterized by a growth in the number, size and importance of hospitals, largely determined by an expanding medical profession. During the 1960s, county councils' responsibility for hospital services became integrated with responsibility for mental health services and general outpatient services, previously a national government responsibility. By 1982, a new act formally handed over responsibility for the planning and provision of services to the county councils. During both the 1960s and the 1970s, health care expenditures and physical resources grew continuously. The chief concern at both the national and local

government levels was to improve equal access to services. Since the late 1980s, attention has shifted to cost control and efficiency, and to a growing demand for performance and quality in more recent times.

Sweden's first public hospital, the Serafimerhospital, was set up in Stockholm in 1752 (Agnell, 1950). It had eight beds that were supposed to fulfil the needs of both Sweden and Finland, which was, at the time, ruled by Sweden. In response to a lack of hospital services outside the capital city, an agreement between the four estates in 1765 made it possible for local authorities to spend locally collected resources on the construction of hospitals. A hundred years later, Sweden had about 50 hospitals and 3000 beds. Most of the hospitals were small, with only 10–30 beds each, and initially they only had one physician each. The slow development reflects the prevailing poverty of Sweden at the time. Physicians and other health care resources outside the hospital setting were the most important providers, not least outside major cities.

In 1862, the county councils were established. This marked the beginning of the development of the present structure of the Swedish health care system. Existing hospitals owned by national government were handed over to the county councils, but the national government maintained ownership of mental health services and the national system of provincial general physicians outside cities. In the following decades several new hospitals were set up by the county councils, a development supported by industrialization and a growing economy. It was not until the Hospitals Act of 1928, however, that the county councils became legally responsible for providing inpatient hospital care to their residents.

In the post-war era, a considerable expansion of the Swedish health sector took place, particularly in the hospital sector (Engel, 1972). At the end of the 1930s, less than one physician in three held a hospital post. This situation had changed drastically by the late 1960s, when roughly 80% of all physicians were employed by hospitals. Approximately 90% of health care expenditure was at the time consumed in hospitals (Anell & Claesson, 1995). The dominant role of hospitals and weak outpatient services were already noticed in government reports in the 1940s. In the Höjer report (SOU, 1948:14), a system of health centres, under public ownership and employing physicians, had been suggested. This suggestion was heavily criticized by the medical profession, most of them specialists at hospitals (Heidenheimer, 1980). Hospital physicians were in practice responsible for most outpatient services and were paid directly by patients according to a fee-for-service scheme. Thus hospital physicians had strong economic incentives to provide private outpatient services and were able to use facilities at the public hospitals for this purpose. Employment at the

hospital and responsibilities of county councils only covered inpatient services. Patients had to pay the entire cost of consultations out of pocket, and were then reimbursed by the national health insurance. A similar model was used for subsidy of prescription drugs and pharmacy services.

In 1970, as part of the “seven-crown reform”, the responsibility for outpatient services was taken over by the county councils following a decision by the national parliament. By then, county councils had already been given responsibility for provincial GPs and also mental health services during the 1960s. For hospital physicians the reform meant a change to full employment with fixed salary (Carder & Klingeberg, 1980). From a patient’s perspective, the reform introduced fixed co-payments for outpatient services (SEK 7/€0.8), which paved the way for more equitable distribution of outpatient services. 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.

Public health care provision was initially administered by the Collegium Medicum. In 1813, the Sundhetscollegium took over this responsibility and in 1878 this body became the Royal Medical Board. In 1968, the Royal Medical Board merged with the Royal Board of Welfare to form the National Board of Health and Welfare. To a large extent, this authority became the architect behind the modern health care structure gradually implemented during the 1970s. The Board published several reports on the organization of primary care and the need for collaboration across county councils to develop tertiary services. The authority is still responsible for the supervision of health care, accountable to the Ministry of Health and Social Affairs. It is also responsible for most health and social services statistics.

By the late 1970s, the county councils were responsible for most health care services with a few exceptions. The Karolinska Hospital in Stockholm and the Academic Hospital in Uppsala, previously owned by the national government, came under county councils’ ownership in the early 1980s. This was followed by a change in 1985 where county councils became responsible for payments to private practitioners. Finally, in 1998, the county councils became responsible for expenditures related to prescription drugs. This means that county councils now have economic incentives to control costs related to prescription drugs – an important objective when the reforms were implemented. The 1998 reform can also be related to the development of making the division of responsibilities between the national government and the local authorities clearer.

During the early 1990s, the trend was rather to transfer responsibility from county councils to municipalities than to give county councils more responsibilities. In 1992, the ÅDEL reform was implemented whereby responsibility for long-term inpatient health care and care for older people was transferred from the county councils to the municipalities. A few years later, the municipalities took over the responsibility of care for the physically disabled (*Handikapp-reformen*, 1994) and for those suffering from long-term mental illness (*Psykiatri-reformen*, 1995). The objective of these reforms was to improve services through integration between care and social services of the municipalities. About one-fifth of total county council health care expenditure was transferred to the municipalities.

During the last two decades, a much more critical attitude towards health care and county councils and municipalities as providers of services, has developed. In addition to distributive justice, objectives related to cost control, efficiency, value and quality have become more prominent in the governance of health care services. In the late 1980s, the lack of choice for inhabitants was debated and, not least, county councils were criticized for a lack of cost control and poor efficiency in expert reports (Roos, 1985). This criticism paved the way for a number of New Public Management (NPM) reforms in the early 1990s, including a purchaser–provider split, new contracts for providers and increased choice for inhabitants. Comparison across county councils indicates a short-term improvement in efficiency in county councils that implemented a purchaser–provider split and payment based on diagnosis-related groups (DRGs) (Jonsson, 1994, 1995; Gerdtham et al., 1999). However, the sustainability of an internal and thereby weak split between purchasers and providers has been questioned (Anell, 1996).

Many county councils indeed returned to a traditional mode of planning and control following the economic recession in the Swedish economy in 1993. The recession initiated an acute demand to contain and even cut costs in the public sector, including health care expenditures. Significant changes were introduced in the hospital sector between 1993 and 1996. The number of beds and the associated nursing staff decreased as well as the ALOS. Emergency care was concentrated as several small hospitals had to focus on elective treatment and/or more limited acute services (Harrison & Calltorp, 2000). As a consequence of developments towards tighter budgets and priorities across hospitals, the need for improved primary care services and services for older people provided by municipalities became clearer. In 2000, a national action plan with special government grants to support the development of primary care and care for older people was implemented.

A further important development during the late 1990s was the merger between county councils. In 1999, the Region Skåne and the Västra Götaland Region were established by merging two and three county councils respectively (Palme et al., 2002). Besides the main task of providing health care services, the new regions were also given increased responsibility for regional development previously managed by county administrative boards accountable to the national government. In the most recent decade, a discussion about the need for similar mergers across additional county councils and formation of additional regions has continued.

NPM and similar reforms have been initiated and implemented by individual county councils and regions rather than at the national level. This can be seen as a reflection of the decentralized nature of Swedish health care that developed during the 1970s and 1980s. The exceptions are choice of providers for inhabitants and privatization of services, which have been given clear support from the centre-right-wing national governments in 1991–1994 and the governments led by the Conservatives in the mid 1990s and since 2006. 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 local county councils has been mandatory. This also means that the previous focus on primary care providers' responsibility for a geographical population has been formally abandoned. Several county councils and regions had already implemented similar reforms from 2007–2009.

Another important and recent national decision was to re-regulate the Swedish pharmacy market by allowing new owners to operate pharmacies from 2009. This re-regulation of ownership was accompanied by a sale of about half of the state-owned pharmacies operated by the National Corporation of Swedish Pharmacies. The number of pharmacies has increased by about 20% since the reform (Swedish Competition Authority, 2010a). Government decisions related to the organization of primary care and pharmacy services can be seen, to some extent, as a return to the conditions prevailing before the “seven-crown reform” and the socialization of pharmacies in the early 1970s.

In more recent times, both county councils and the national level have developed an increased interest in a knowledge-based form of governance over health care services. This interest is in turn based on the emerging overall performance paradigm of governance, giving more attention to the quality and value of health care services. New initiatives have increasingly

been implemented through collaboration between county councils and the national level. Examples include: a system of transparent comparison of clinical indicators across county councils; increased transparency in priority setting; and development of evidence-based medicine including the use of cost-effectiveness to determine the value of services (see chapter 6 and section 2.8.4 *Regulation and governance of pharmaceuticals*).

2.3 Organizational overview

2.3.1 National level

The Ministry of Health and Social Affairs works to meet the objectives set by the Riksdag in the area of health care, health and social issues/insurance. This includes people's financial security, social services, health care, public health and the rights of children and people with disabilities. There are eight government agencies directly involved in the area of health, medical care and public health: the National Board of Health and Welfare (*Socialstyrelsen*), the HSAN (*Hälso- och Sjukvårdens Ansvarsnämnd*), the SBU (*Statens Beredning för Medicinsk Utvärdering*), the MPA (*Läkemedelsverket*), the TLV (*Tandvårds- och Läkemedelsförmånsverket*), the Swedish Agency for Health and Care Services Analysis (*Myndigheten för vårdanalys*) and the National Institute for Public Health (*Folkhälsoinstitutet*), the Swedish Social Insurance Agency (*Försäkringskassan*).

The National Board of Health and Welfare is a large government agency, engaged in a wide range of activities in the areas of social services, health care services, environmental health, communicable disease prevention and epidemiology. The Board develops norms and standards, provides support, supervises that these are observed through data collection and analysis, and disseminates information. Moreover the Board maintains health data registers and official statistics. All health care personnel come under the supervision of the National Board of Health and Welfare.

The HSAN is a government agency that decides on disciplinary measures in the event of complaints or possible malpractice (see section 2.9).

The primary objective of the SBU is to promote the use of cost-effective health care technologies. The SBU has the mandate to review and evaluate health care technology from medical, economic, ethical and social points of

view. Information on reviews of evidence is disseminated to central and local government officials and medical staff to provide basic data for decision-making purposes (see section 2.7.2 *Health technology assessment*).

The MPA is the Swedish national authority responsible for the regulation and surveillance of the development, manufacture and sale of drugs and other medicinal products. All drugs sold in Sweden must be approved by and registered with the MPA (see section 2.8.4 *Regulation and governance of pharmaceuticals*).

The TLV (formerly LFN until 2008) started its operation in October 2002 with the primary task of deciding if a medicine or medicinal product should be subsidized and included in the pharmaceutical benefits scheme (see section 2.8.4 *Regulation and governance of pharmaceuticals*). Since 2008, the TLV also has the mandate to decide which dental services should be subsidized. The TLV is also responsible for monitoring activities in the pharmacy market.

The Swedish Agency for Health and Care Services Analysis, established by the government on 1 January 2011, will analyse and evaluate implemented measures and the availability of information within the sphere of health and care service policy from the perspective of citizens and patients.

In the area of public health, the National Institute for Public Health is also a government agency under the Ministry of Health and Social Affairs. It is similar to the national government health departments that exist in many countries, but it reports both to the Minister of Health and Social Affairs and to an independent board of directors. The main tasks of the Institute are to promote health and prevent diseases by providing the government, government agencies, municipalities and county councils with knowledge based on scientific evidence (see section 2.6).

Regarding financial security, the Swedish Social Insurance Agency (*Försäkringskassan*) is the authority that administers the various types of insurance and benefits that make up social insurance in Sweden. Insurance benefits include sickness insurance, parental insurance, basic retirement pension, supplementary pension, child allowance, income support and housing allowance. The Agency is also engaged in work designed to prevent and reduce ill health through positive proactive action with the eventual goal of returning the person to the workforce. The Swedish Social Insurance Agency has a regional branch office in each county council that processes individual cases at the regional and local levels. There are also about 250 local offices serving local residents.

The regional and local authorities are represented by the SALAR (*Sveriges Kommuner och Landsting*) at the national level. The SALAR was formed in 2007 by merging the Federation of Swedish County Councils (*Landstingsförbundet*) and the Swedish Association of Local Authorities (*Svenska Kommunförbundet*). The SALAR is a collaborative nationally oriented organization, representing all county councils/regions and municipalities in Sweden. The organization strives to promote and strengthen local self-government and provide local authorities with expert assistance. In addition, it serves as the employers' central association for negotiating terms of employment and local wage bargaining for the personnel employed by the county councils and municipalities. The members of the SALAR represent the largest employers in Sweden, with more than 1 million employees in 2009 and about one-third of these in health care (SALAR, 2010a).

There is also an employers' association for negotiating wages and terms of employment for the personnel employed by private health care providers – the Association of Private Care Providers Almega (*Vårdföretagarna Almega*). In 2011, they represented about 2000 companies with about 62 000 employees (Association of Private Care Providers Almega, 2011).

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 110 000 registered nurses, midwives, biomedical scientists and radiographers (Swedish Association of Health Professionals, 2011). The Swedish Medical Association (*Sveriges läkarförbund*) is the union and professional organization representing physicians. About 90% or 43 000 of Sweden's doctors were members of the organization in 2011 (Swedish Medical Association, 2011).

There are about 1200 pharmacies in Sweden. The Swedish Pharmacy Association (*Sveriges Apoteksörening*) is the trade association for pharmacy operators. In 2011, it had 13 members who represent nearly 100% of the pharmacy market in Sweden (Swedish Pharmacy Association, 2011).

The Research-based Pharmaceutical Industry in Sweden (*Läkemedelsindustriföreningen*, known by its Swedish acronym LIF) is the trade association for the pharmaceutical industry in Sweden. LIF has about 75 members who represent approximately 80% of the total sales of pharmaceuticals in Sweden (Research-based Pharmaceutical Industry in Sweden, 2011).

There are over 100 patient and consumer organizations in Sweden (see section 2.9.6 *Patients and cross-border health care*).

2.3.2 Regional level

At the regional level, the structure of care can be divided into primary care, district county council care (*Länssjukvård*) and regional care (*Regionsjukvård*). There are approximately 1100 primary care centres, about 70 district county council hospitals and 7 regional/university hospitals. The county councils have the overall responsibility for all health care services delivered (including dental care). The executive board of the county council, or an elected hospital board, decides how to organize the management.

The county councils are grouped into six medical care regions (the Stockholm Region, the South-Eastern Region, the Southern Region, the Western Region, the Uppsala–Örebro Region and the Northern Region). These regions were established to facilitate cooperation in tertiary care among the county councils (see section 2.5). Each region serves a population averaging more than 1 million people.

Hospitals are primarily publicly owned. There are six private hospitals in the country of which three are not-for profit (see section 5.4). The proportion of private primary care units varies substantially between the county councils. In Stockholm, Halland and Västmanland about half of all units are privately owned, whereas only a few private primary care units exist in some county councils, for example in the northern part of the country.

2.3.3 Municipal level

The traditional organization of the municipalities involves a municipal executive board, a municipal council and several local government committees. The municipal executive board leads and coordinates the entire municipality's business and acts as a supervisor for the committees. The board is responsible to the municipal council for following up on matters that influence the development and economy of the municipality. The municipal council's duty is to make decisions about taxes, goals and budgets for all community-run businesses, and about the organization and tasks of the committees.

The responsibilities of a municipality include issues relating to the immediate environment of the citizens, for example schools, social welfare services, roads, water, sewerage, energy, etc. Besides providing financial assistance, social services in Sweden cover child care, school health services, environmental hygiene, and care for older and disabled people and long-term psychiatric patients. Patients who have been fully medically treated and have

been discharged from emergency care or geriatric hospitals also fall within the remit of the municipalities. There are both public and private nursing homes and home care providers.

2.4 Decentralization and centralization

Local self-government has a very long tradition in Sweden (see section 2.2) and is intended to create opportunities for development in service provision throughout the country. Decentralization of responsibilities within the Swedish health care system not only refers to relations between central and local government, but also to decentralization within each county council. Since the 1970s, financial responsibility has gradually been decentralized to providers within each county council. The county councils' financial and planning responsibility for health care services is clearly articulated in the 1982 Health and Medical Services Act, and has been further reflected in decentralization efforts within each county council. Changes in county council management systems reflect the goals and problems that county council politicians and responsible officials have encountered. The degree of decentralization, organization and management has come to vary considerably among county councils. As a result, the tradition of local self-government has led to regional differences in the governance and provision of health care between county councils. Local self-government is partly intended to create different solutions to service delivery rather than similar services in all county councils and regions. The strong tradition of local self-government has however also led to less favourable regional differences, for example with respect to the uptake of new medicines. Regional differences with regard to treatment praxis and treatment results as well as difficulties in coordination of care between county councils and municipalities have been debated during the 2000s (National Board of Health and Welfare, 2011a; SOU, 2007:10).

During the latter part of the 1990s and the 2000s there have been efforts towards strengthening national influence, partly driven by the need to better coordinate care and to reduce regional differences. One example is the strengthened role of government agencies. The National Board of Health and Welfare is commissioned by the government to provide evidence-based guidelines for the care and treatment of patients with serious chronic illness. The guidelines include recommendations for decisions on priority setting, and provide national support to assist health care decision-makers (county councils and municipalities) and providers in establishing health care programmes and

setting priorities. Another example is the development of national “action plans”, supported by additional government grants that have been implemented to strengthen available resources and to encourage coordination between the care for older people, psychiatric care and primary care.

Since the late 1990s, there has also been a tendency towards regional concentration or centralization through mergers of hospitals and county councils and increased cooperation between different levels of care and between hospitals. Two regions – Skåne and Västra Götaland – were formed in 1999. Previous national policies of decentralization have been replaced by the reverse trend of centralization and regionalization in the delivery of care during the 2000s. In a report from the Committee on Public Sector Responsibilities (SOU, 2007:10), it was proposed that the 21 county councils should be replaced by between 6 and 9 regional authorities, with responsibility for the provision of health care but also with increased responsibility for other regional matters. Two other examples of centralization include the establishment of the Committee for National Specialized Medical Care (*Rikssjukvårdsnämnden*) in 2007 and the development of regional cancer centres (RCCs; see chapter 6).

2.5 Planning

According to the Health and Medical Services Act of 1982, the county councils are expected to plan the development and organization of health care according to the needs of their residents. Thus, the county councils/regions make most of the resource-allocation decisions regarding health services within their geographical area. Traditionally, however, the central government and the county councils have collaborated extensively regarding planning and resource allocation for highly specialized regional (tertiary) health services and certain investments in high technology (see section 6.1.1 *Continued specialization and concentration within the hospital sector*). The National Board of Health and Welfare and other agencies produce information and statistics regarding current and future demands in the population on which county councils and regions can base their decisions.

2.6 Intersectorality

The responsibility for performing cross-sectoral follow-up and evaluation of national public health policies lies with the National Institute of Public Health. The national public health policy is based on 11 public health objective domains, covering the most important determinants of Swedish public health and by which all affected public authorities at all levels should be guided (see section 1.4).

Participation and influence in society constitutes objective domain number one. The public health bill emphasizes that efforts to strengthen democracy and defend human rights reinforce the feeling of affinity in society as a whole and increase trust between people which promotes good health. Labour market policy, media policy, gender equality, integration and disability policies are fields affected by this domain. Public health efforts are focused on developing indicators and targets that enable prioritization and follow-up.

Economic and social prerequisites and conditions during childhood and adolescence constitute objective domains number two and three. In this area it is stated that financial and social security, equality in living conditions, equal rights and justice should be achieved to avoid financial stress and social insecurity which causes ill health and leads to increased health inequalities. The main targets for public health interventions concerning these domains are financial transfers to families, support of good parenthood, high-quality pre-schools for all children, high-quality schools and access to leisure activities that support healthy development.

Health in working life constitutes objective domain number four. A good working life with well-functioning working conditions reduces work-related illness and social differences in illness, and contributes to improved public health in general; it is also a necessary prerequisite for sustainable growth. In Sweden, the responsibility of employers is regulated in the Work Environment Act. Healthy and safe environments and products, objective domain number five, covers widely different types of environments and exposure situations regarding sound external environment/air quality, sound products, sound indoor and local environment (including noise) and safe environments and products.

Health-promoting health services constitute objective domain number six. This domain articulates that a more health-promoting and disease-preventive perspective should permeate all health services and be an obvious part of all care and treatment. Moreover, the importance of a strong and well-functioning primary care service is pointed out. Special attention is given to supporting

vulnerable individuals or groups, and to supporting equal health at the population level. Work aimed at the population includes reporting causes of health inequalities as well as cooperating with key actors in health promotion and preventive efforts.

Objective domains number seven and eight are protection against communicable diseases, and sexuality and reproductive health. Work in this area is concentrated on preventive measures such as targeted information campaigns, vaccination programmes and measures targeting testing and contact tracing (see section 1.4). Recent work in the area of communicable diseases includes intensified international cooperation in the field of infectious disease prevention. The Swedish government assigns a high priority to infectious disease prevention issues both in the cooperation that takes place in the EU, in the immediate surroundings, and in the cooperation that takes place under the direction of WHO and the rest of the United Nations system on a global basis.

Physical activity constitutes objective domain number nine. The target of efforts for the many authorities and stakeholders affected by this area is for society to be shaped so that it provides the conditions for increased physical activity for the entire population. It is envisioned that this will be accomplished primarily through efforts that stimulate greater physical activity in pre-school and school, and in association with work and during leisure time, as well as offering opportunities for exercise or training to older people, those experiencing long-term illness and disabled people on their own terms. Connected to this is the tenth objective domain – eating habits and food. The government emphasizes in the public health bill the urgency of formulating a target for societal efforts with regard to eating habits. The goal of food policy is ecologically, economically and socially sustainable food production.

Tobacco, alcohol, illicit drugs, doping and gambling constitute objective domain number eleven. The government has set ambitious targets in this area. They are to reduce tobacco use, to reduce the medical and social damage of alcohol, to have a society free from illicit drugs, to reduce the damage from excessive gambling and to have a society free from doping. Reducing alcohol consumption and tobacco use, and working for a narcotic-free society have long been important public health issues and natural parts of welfare policies in Sweden (see section 1.5).

2.7 Health information management

2.7.1 Information systems

As within other areas in health and medical care the tradition of local self-government has led to regional differences in the use of information systems. Different county councils, regions and municipalities have come up with different solutions and are using different information systems that are not always compatible across or even within county councils/regions and levels of care. Patient databases located in every county council are important sources of information. These databases are based on individual identification numbers and include information about inpatient treatment and clinical investigations/tests and some information about outpatient care.

Overall responsibility for collecting and maintaining databases for epidemiological surveillance lies with the Centre for Epidemiology, which is part of the National Board of Health and Welfare. The overall objectives of the Centre for Epidemiology are to describe, analyse and report on the distribution and development of health, diseases and social problems, and on the utilization of health and social services and its determinants in different population groups within Sweden. In collaboration with the WHO Regional Office for Europe, the Centre for Epidemiology has developed an epidemiological and social information database covering national, regional and municipality data. Furthermore, at the national level there are registers covering different aspects of the health status of the Swedish population, that is, the patient register, the medical register of birth and congenital malformations, the cancer register and the mortality cause register.

The Swedish Institute for Infectious Disease Control (*Smittskyddsinstitutet*) is a government expert authority that monitors the epidemiology of infectious diseases among Swedish citizens and promotes the control and prevention of such diseases. Two of the main tasks of the Swedish Institute for Infectious Disease Control are surveillance of communicable diseases and analysis of the current epidemiological situation in Sweden (and internationally). The surveillance is carried out in close collaboration with the County Medical Officers of Communicable Disease Control. The basis for the surveillance is the registration of notifiable diseases specified in the Communicable Disease Act of 1988. According to this Act, a physician is under a duty to notify cases (diagnoses) of 54 communicable diseases grouped into diseases dangerous to society (e.g. diphtheria, hepatitis, cholera and rabies), sexually transmitted diseases (such as gonorrhoea and HIV), and other notifiable diseases (such as

malaria and measles). These pathogens are notifiable, in parallel, to the Swedish Institute for Infectious Disease Control and the County Medical Officers, by both clinicians and laboratories.

There are about 90 national quality registers in Sweden that represent a comprehensive primary data source for comparative studies and play an important role in work related to monitoring and evaluation of health care quality. A national quality registry contains individualized data concerning patient problems, medical interventions and outcomes after treatment (see section 6.1.7 *An emerging performance paradigm in the governance of health care*). It is annually monitored and approved for financial support by an executive committee. There are four competence centres for the national quality registries that receive central funding. In a competence centre, several registries share the costs for staff and systems that it would not be possible for a single registry to fund. The vision for the quality registries and the competence centres is to constitute an overall knowledge system that is actively used on all levels for continuous learning, quality improvement and management of all health care services.

The register on waiting times, the National Health Care Barometer Survey and the National Patient Surveys in primary care and in specialized care are operated under the auspices of the SALAR. Information about waiting times is reported by all county councils and regions to the SALAR. The SALAR compiles the information in a database containing national information about waiting times in both primary care and specialized care at hospitals. There are also targeted projects aimed at collecting information about availability and waiting times for certain patient groups, for example cancer patients (National Board of Health and Welfare, 2011a). The results are published through the Internet and comparisons of results between different providers are intended to guide patients in their choices about where to seek care or with which primary care provider to register (see section 2.9.1 *Patient information*). The information received and published from the National Patient Surveys is also aimed at improving the quality of care across providers since the publication of performance data may have a positive effect on provider behaviour.

The municipalities and the county councils collect information about management and the financing and provision of health care services, both for their own purposes and for reporting purposes. Information regarding the financing and provision of health care services is reported to the SALAR and Statistics Sweden.

2.7.2 Health technology assessment

Under Swedish law, health service staff must work in accordance with scientific knowledge and accepted standards of practice. Research results and comprehensive clinical experience should guide the delivery of health care. The SBU has the mandate of the Swedish government to review and evaluate health care technology from medical, economic, ethical and social points of view. The 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. The SBU also identifies important knowledge gaps, that is, areas in which further research is urgently needed.

The SBU organizes its work on a project basis. For each project, a multidisciplinary team, consisting of leading national experts is recruited. The team conducts comprehensive assessments by systematically searching, selecting, reviewing and evaluating research findings from around the world. Typically, the projects include systematic literature reviews. When assessments deal with very broad disease areas (e.g. anxiety, depression, back pain, substance abuse, obesity), the process can take several years; projects that address single interventions are completed much faster. Information on results is disseminated to central and local government officials and medical staff to provide basic data for decision-making purposes.

The main health technology assessment body regarding pharmaceuticals is the TLV, which assesses the cost–effectiveness of both prescription and hospital drugs. Since 2002, the TLV has the mandate to decide if a drug should be included in the National Drug Benefit Scheme. With regard to new products, the TLV makes decisions on applications from companies who want their medicines to be eligible for reimbursement. Moreover, the TLV is responsible for assessing the medicines included in the benefit scheme before 2002. Value-based pricing is practised for prescription drugs in Sweden (see section 2.8.4 *Regulation and governance of pharmaceuticals*). The TLV is guided in its reimbursement decision by the three principles that apply to all health care in Sweden:

- The human value principle, which underlines the respect for equality of all human beings and the integrity of every individual. This means that the TLV does not discriminate against people because of sex, race, age and so on when making decisions on reimbursement.

- The need and solidarity principle, which implies that those in greatest need take precedence when it comes to reimbursing pharmaceuticals. Thus, people with more severe diseases are prioritized over people with less severe conditions.
- The cost–effectiveness principle, which states that the cost of using a medicine should be reasonable from a medical, humanitarian and social-economic perspective.

The National Board of Health and Welfare 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 the SBU, MPA and the 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 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, and one for patients and their relatives.

Despite national guidelines, variation remains in the care and treatment of patients with for example chronic illnesses. The guidelines have also been criticized for having a weak link to clinical practice. As a result of the gap between guidelines and actual clinical practice, recent policy work in the area has come to focus on strategies for the implementation of guidelines and recommendations.

When setting the guidelines, the Board members consider the three basic ethical principles that apply, by law, to all health care in Sweden. As directed by the government, the Board must report on how the guidelines affect the practice of medicine (National Board of Health and Welfare, 2003b). By 2011, guidelines including recommendations for local decisions on priority setting had been developed for the following areas: prevention, dental care, schizophrenia, dementia, depression and anxiety, diabetes, stroke, cardiac care, alcohol and drug abuse, as well as breast-, lung-, colorectal- and prostate cancer.

2.8. Regulation

The Ministry of Health and Social Affairs is responsible for developments in areas such as health care, public health, social insurance and social issues. The Ministry draws up terms of reference for government commissions and draft proposals for parliament on new legislation, and prepares other government regulations. The most important law regulating the provision of health care is the Health and Medical Services Act of 1982. The Act requires the county councils to promote the health of their residents and to ensure equal access to health care. Care for older and disabled people by municipalities is regulated by the Social Services Act of 1980, which states that older people have the right to receive public services and help at all stages of life. People with disabilities are entitled to support also under the Act Concerning Support and Service for People with Certain Functional Impairments (1993). The most important law regarding dental care is the Dental Care Act of 1985 (1985), which states that the county councils are responsible for providing high-quality dental care for all their citizens. Other laws regulate the responsibility and obligations of personnel, confidentiality, the qualifications needed to be able to practise medicine and rules on how to handle patients' records.

2.8.1 Regulation and governance of third-party payers

The market for VHI is still small in comparison with other European countries but it is growing. An important reason for having individual private insurance is to be able to get quicker access to a specialist in ambulatory care and to avoid waiting lists for elective treatment. In 2000, about 103 000 people had private health insurance compared to 382 000 people in 2010. More than 80% of all private health insurance was, however, paid for by employers in 2010 and only 6% was paid for directly by individuals (Swedish Insurance Federation, 2011). Private health insurance is thus to a large extent linked to occupational health care services.

2.8.2 Regulation and governance of providers

The National Board of Health and Welfare is the government's central advisory and supervisory agency in the field of health services, health protection and social services. The agency must follow up on and evaluate the services provided to determine whether they correspond to the goals laid down by the central government. Regulations produced by the National Board of Health

and Welfare state that regular, systematic and documented work should be conducted to ensure the quality of care. Furthermore, all members of staff are formally obliged to participate in quality assurance programmes.

In 2011 a new Patient Safety Act (2010) came into force. According to the Act, health care workers are personally responsible for their own actions. The Act states that responsibilities of health care providers include: the implementation of systematic patient safety work and preventive work; an obligation to analyse adverse events; a requirement to inform patients and relatives as soon as possible when harm occurs; and that patients and relatives should be a part of the patient safety work. If a patient suffers an injury or disease in connection with his/her medical treatment, or is exposed to risk because of his/her treatment, the provider is obliged to report the incident to the National Board of Health and Welfare. Also patients and relatives can make referrals to the National Board of Health and Welfare. The Board can then issue a critique of the provider and may send a report to the HSAN with a request regarding disciplinary measures.

All public procurement of goods and services over a certain threshold value (€125 000 for central government and €193 000 for other contracting authorities, including municipalities and county councils in 2010) is governed by the Swedish Public Procurement Act (2007). The Act is largely based on the EU Directive 2004/18/EC concerning public procurement. The aim of the procurement rules is to ensure that contracting authorities, such as central government authorities and county councils, use public funds to finance public purchases in the best possible way by taking advantage of competition in the relevant market. At the same time, the rules and regulations aim to afford suppliers the opportunity to compete on equal terms for each public procurement.

Five principles apply to all public procurement according to the Act. The “principle of non-discrimination” means that it is prohibited to discriminate against suppliers, directly or indirectly, on the grounds of nationality. The “principle of equal treatment” means that all suppliers should be treated equally, for example, have access to the same information. The “principle of transparency” means an obligation for the contracting authority to create transparency by providing information about the procurement procedure and how it will be conducted. The “principle of proportionality” means that requirements for the supplier and requirements in the specification must have an obvious link with and be proportionate in relation to the subject matter of the contract. The “principle of mutual recognition” means that diplomas and certificates issued by authorities authorized by a Member State will also apply in other EU/European Economic Area countries.

A county council cannot prevent a practitioner from establishing a private practice; the regulatory power is restricted to controlling the public financing of private practitioners. County councils regulate the establishment of new private primary care practices that are eligible for public funding through conditions for accreditation. A private health care provider must have an agreement with the county council in order to be publicly reimbursed. If the private provider does not have an agreement, the provider is not reimbursed and 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 county councils but based on earlier state 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. In 2009, in connection with the choice reform in primary care (see section 2.9.2 *Patient choice*) a law giving private and public providers equal conditions for establishment was adopted (Act on System of Choice in the Public Sector, 2008). According to the law, payment of providers should follow the patients' choice of provider.

Since the responsibility for provision of care is decentralized to the 21 county councils and regions the conditions for accreditation vary throughout the country. Regarding the recently implemented primary health care reform, it is regulated by law (Act on Freedom of Choice in the Public Sector) that freedom of establishment applies to all (public and private) health care providers that fulfil the requirements decided by the local county council. The requirements primarily focus on the minimum level of clinical competences represented in the primary care unit. The same requirements apply to both private and public providers.

2.8.3 Registration and planning of human resources

All health care personnel come under the supervision of the National Board of Health and Welfare. The Board is also the licensing authority for physicians, dentists and other health service staff (see section 4.2.3 *Training of health workers*). In addition, the Board is the designated authority under European Community Directives for the mutual recognition of diplomas and certificates relating to the health professions. The licences are not given for a specific period of time, that is, health care personnel do not have to re-apply in order to keep their licence. However, in cases of malpractice the National Board of Health and Welfare can withdraw a licence after a decision by the HSN (see section 2.9.4 *Complaints procedures*).

2.8.4 Regulation and governance of pharmaceuticals

The MPA is the government agency charged with approving new pharmaceutical products and granting permission for drug production. Its activities are regulated by a law governing medical products, which has been adapted to fit EU regulations. The MPA is also responsible for providing information about medicines, giving permission to carry out clinical trials, approving licences and controlling natural remedies and other medicine-related products.

The Medical Products Act of 1992 constitutes the basis for all activities connected with pharmaceuticals and drug distribution in Sweden. The fundamental requirements for medicinal products stated in the Medical Products Act (1992) also apply to natural remedies. A new natural medicine should only be sold when the MPA has granted marketing authorization. The authorization is valid for five years and can then be renewed for each subsequent five-year period.

The list of drugs included in the National Drug Benefit Scheme has been established by the TLV since 2002. Moreover, in 2010 the mandate of the TLV was augmented to also include assessment of hospital drugs. The Swedish government has set a time limit of 120 days for decisions on reimbursement and pricing in Sweden. Value-based pricing is practised for prescription drugs, which means that the price of a drug should reflect its value to society rather than the marginal cost of production or prices in other countries. A societal perspective is used when the TLV assesses the cost–effectiveness of a pharmaceutical and makes decisions regarding reimbursement. All costs and benefits related to treatment should be taken into account, 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 medicines are either granted or denied reimbursement status for the whole of its approved area (by the MPA). The TLV may, however, restrict the reimbursement of a pharmaceutical to a narrower patient group than it is approved for by the MPA.

With regard to new products, the TLV makes decisions on applications from companies that want their medicines to be eligible for reimbursement. In 2010, the TLV handled 100 applications regarding new products – 54 regarding pharmaceuticals and 46 regarding medicinal products. Of the applications for pharmaceuticals, 44 decisions regarding new original preparations were made. Of those, 2 applications were denied reimbursement and 28 were approved with restrictions, for example regarding a narrower patient population than

had been applied for (TLV, 2011). Another task for the TLV is to assess the medicines included in the benefit scheme before 2002. This exercise started at the end of 2003 and is ongoing. The medicines are reviewed according to therapeutic groups.

The Swedish pharmacy monopoly was deregulated in 2009, allowing new owners and chains to operate pharmacies in Sweden. In 2011 there were 13 pharmacy operators in Sweden, compared to the previous monopoly situation with one stated-owned pharmacy. There are about 1200 pharmacies throughout the country. Pharmacies are obliged to provide all prescribed drugs within a time limit of 24 hours. The sale of selected OTC drugs, such as nasal sprays and painkillers, in licensed facilities outside pharmacies was also allowed from 2009.

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 have to pay the difference between the generic product and the more expensive branded pharmaceutical out of pocket.

At the local level, county councils have formulary committees (*läkemedelskommitté*) whose responsibility is to make recommendations concerning the use of pharmaceuticals. By law every county council should have at least one formulary committee (Medical Products Committees Act 1996).

The regulation of medicinal products is similar to that of pharmaceuticals. The MPA works to ensure that medicinal products are safe, effective and of good quality and the TLV decides which medicinal products are to be included in the subsidies system (see section 2.8.4 *Regulation and governance of pharmaceuticals*).

2.8.5 Regulation of medical devices and aids

According to the Swedish Medical Devices Act (1993) and the Medical Devices Ordinance (1993) a medical device must achieve its intended purpose as designated by the manufacturer and involve no unacceptable risk to patients, staff or third parties. The medical devices legislation is supervised by the MPA. Each medical device placed on the market must comply with the requirements in the Medical Devices Act, irrespective of how the device is to be used and

risks associated with its use. A device is considered suitable if, when used as intended, it achieves the performance intended by the manufacturer and meets high standards for the protection of life, personal safety and health of patients and others.

2.8.6 Regulation of capital investment

There are recurrent and capital budgets for health care at different organizational levels, that is, county council, district and clinic levels. Decisions about capital investments can take place at any of these levels, depending on the size of the investment. For smaller investments, the decision can be made at clinic level, while larger investments require a decision at a higher level. Thus, the clinic requests funding from the district board, which in turn may request funding from the county council. All public procurement over a certain value is subject to the Public Procurement Act (section 2.8.2 *Regulation and governance of providers*).

2.9 Patient empowerment

2.9.1 Patient information

All county councils and regions provide information about how and where to seek care through their websites. There are also several national projects aimed at improving the access and use of information for patients and citizens. The initiative 1177.se is a collaborative project between all county councils and regions in Sweden. At the web site 1177.se, information written by medical staff about pharmaceuticals, different medical conditions and pathways for seeking care, etc. is provided. There is also a chat-service where people can ask questions and get quick answers. At the phone line 1177, which is open 24 hours every day, 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, renew drug prescriptions and obtain information about test results. There are also private initiatives such as omvard.se which is a web site financed by the Confederation of Swedish Enterprise (*Svenskt Näringsliv*). One important aim of omvard.se is to provide citizens and patients with comparative information about providers on which to base their choice of provider. The comparison of providers is partly based on information collected through National Patient Surveys.

The public release of information regarding quality of care started with information about waiting times in the 1990s (www.vantetider.se). Moreover, in the 1990s, a national population survey (*Vårdbarometern*) was initiated regarding attitudes towards health care performance. The design makes it possible to compare developments in different county councils. One important initiative is the annual regional and transparent comparison (*Öppna jämförelser*) which has been a collaboration between the National Board of Health and Welfare and the SALAR since 2006. The most important source of data for the regional comparisons are the national quality registers (see section 2.7.1 *Information systems*), but also information about waiting times, comparison of expenditures/costs provided by the SALAR and population and patient surveys are used. The open comparisons for health care services from 2011 include 173 indicators in total, organized into different categories, such as prevention (e.g. child immunization and mammography); patient satisfaction and trust (based on survey); access; surgical treatment (e.g. complications, re-operations); and drug treatment (e.g. use of antibiotics). The focus is on comparison and ranking across county councils for each indicator. Results are shown for hospitals for some 50 indicators, but without rankings.

Developments towards choice and privatization have created a need for information on differences in quality and patient satisfaction across providers. A recurrent National Patient Survey (*Nationella Patientenkäten*) is administered to all health care providers in primary care (since 2009) and specialized hospital care (since 2010) in participating county councils. The National Patient Survey is coordinated by the SALAR and conducted every two years. All county councils and regions are expected to participate in the 2011 survey on primary care. The information generated through this survey makes it possible to compare providers in primary care since 2010 and in specialized care since 2011. The results are public and one purpose is to guide people in their choice of provider (see section 2.7.1 *Information systems*).

There is limited information on the actual use of public information about quality of care by patients and citizens. In a recent study, based on a population survey in three Swedish counties, it was found that people are rather passive in their search for information when choosing a primary care provider (Glenngård, Anell & Beckman, 2011). People tended to get their information from providers with whom they had previously been in contact.

2.9.2 Patient choice

Choice of health care provider has been introduced gradually since the 1990s. In the early phases of this development, provider choice for patients was not combined with privatization and freedom of establishment of providers, and payment to providers seldom followed the choice of patients. In 1991, a recommendation was issued by the Federation of County Councils giving patients the right to choose their provider in primary care and to seek care at any hospital or specialist within the county council. Several county councils agreed to expand the option to choose by including neighbouring county councils. In 2001, the recommendation was revised to include day treatment as well.

Choice of primary care provider for the population combined with freedom of establishment for providers accredited by local county councils became mandatory in Sweden in January 2010. This is articulated in the Health and Medical Services Act passed by the parliament. More than 200 private primary care providers have been established in connection with or after the introduction of freedom of establishment in Swedish primary care (Swedish Competition Authority, 2010b). Patients can register with any public or private provider accredited by the local county council. In all county councils, except Stockholm county council, passive registration is practised for individuals who do not make an active choice of primary care provider. Such passive registration is based on the latest visit or shortest geographical distance to a provider. A recent study shows that approximately 60% of the population in three counties in Sweden (Halland, Skåne and Västra Götaland) feel that they have made a choice of primary care provider in connection with or after the introduction of the reform (Glenngård, Anell & Beckman, 2011).

Historically, the patient's right to choose a provider has not been part of formal national legislation in Sweden but rather has been adopted by county councils and municipalities on a voluntary basis. In 1992, a national guarantee of treatment for 12 elective treatments was introduced. The guarantee was the result of an agreement at the national level between the Ministry of Health and Social Affairs and the Federation of County Councils. The government granted extra funding to the county councils and gave patients who did not receive care within three months the right to seek treatment in another hospital, either in the same county or outside the patient's county of residence. In practice, this guarantee had limited effect since most patients chose to wait for treatment at "their" hospital, even if the waiting time exceeded three months. Since 2005, there has been a new care guarantee, based on the "0-7-90-90" rule – meaning instant contact (zero delay) with the health care system for consultation; seeing

a GP within 7 days; consulting a specialist within 90 days; and waiting for no more than 90 days after being diagnosed to receive treatment. The guarantee applies to the whole country and also includes all elective care in the county councils. In 2010, the guarantee was incorporated into national legislation through a change in the Health and Medical Services Act.

2.9.3 Patient rights

There is no specific law regulating patients' rights in Sweden, as opposed to in other Nordic countries. Instead, different rights for patients, such as patient choice or the right to information, are incorporated in other legislation and are formulated in policy agreements between the state and the county councils through the SALAR. Regulations are mainly targeted at the behaviour of personnel and only indirectly at patients' rights. For instance, personnel are obliged to provide individually tailored information but patients have no articulated right to receive such information (Winblad & Ringard 2009). In March 2001, however, the government appointed a committee of inquiry with the task of investigating how to strengthen the patients' position and influence over care and develop a proposal for a new patients' act (Ministry of Health and Social Affairs 2011). Preliminary results are to be delivered in June 2012 and a final proposition no later than in January 2013. The proposal should include how to:

- provide health care on equal terms for the population;
- increase and strengthen patient choice;
- improve access to information and advice;
- encourage different government agencies to go about strengthening the patient's position; and
- enhance better exchange of information between the patient and the caregiver.

The basic principle of health care provision in Sweden is that everyone has the same right to good quality care. The 1982 Health and Medical Services Act defines the county councils' responsibility to provide all their citizens with high-quality health care services. There are several different bodies sharing the task of safeguarding patients' interests in receiving adequate and safe health care. In 1999, patients' rights in the health care system were further strengthened when the county councils' obligations towards them were increased through a change in the Act. According to the revised Act, the health care system is responsible for strengthening the position of the patient through individualized

information, opportunities to choose between alternative treatments and the right to a second opinion, when suffering from a life-threatening or other particularly serious disease or injury.

Moreover, every county council and municipality must have a patients' committee. The committees should support and help individual patients and contribute to quality development in the health care system by helping patients to get the information they need to safeguard their interests, promoting contact between patients and health care personnel, helping patients to get in touch with the appropriate agency and reporting to care providers and care units any observations and irregularities of significance to patients.

2.9.4 Complaints procedures

The HSAN is the government agency that decides on disciplinary measures in the event of complaints or possible malpractice. It can enforce disciplinary measures such as a warning, or can limit – or even withdraw – a health care professional's right to practise. In 2010, 4563 complaints were made, and the HSAN judged a similar number of cases. About 11% of all complaints led to disciplinary measures and a majority of all cases concerned physicians. About 20 withdrawals of health care professionals' right to practise (physicians, nurses, dentists) are made every year (HSAN, 2011).

The process regarding complaints connected to medical staff is separated from the system that compensates patients for injuries. In 1997, every health care authority became legally obliged to provide compensation for injuries sustained in the course of clinical procedures, regardless of fault. Every institution providing health services has a legal obligation to provide compensation for injuries that occur in the course of their activities. Under the terms of the Patient Injuries Act, any person suffering an injury in connection with medical or dental care in Sweden is, in certain cases, entitled to compensation under the patient injury insurance scheme. For patients receiving treatment through one of the county councils or from a private care provider with whom the county council has entered into a treatment agreement, the county councils are insured by the County Councils' Mutual Insurance Company (*Landstingens Ömsesidiga Försäkringsbolag*). Compensation may be paid if the patient has: (1) suffered an injury that could have been prevented; (2) incurred an infection in conjunction with treatment; (3) suffered an accident during medical or dental treatment; (4) been prescribed the wrong medicine; (5) been incorrectly diagnosed; or

(6) if defective medical or dental equipment has been used. Patients can be compensated for loss of income, additional expenses, pain and suffering, and for disfigurement or permanent disability.

In approximately 45% of all cases the patient is given compensation. Under the Patient Injuries Act, the institutions are insured to meet demands for financial compensation from patients who have suffered such an injury (County Councils' Mutual Insurance Company, 2011). During 1997, approximately 8000 complaints were made. This figure increased to approximately 9000 in the year 2000 and has been fairly stable since then. During 2010, 10 500 complaints were made and SEK 420 million (€47 million) was paid in compensation to patients who had suffered injuries that could have been prevented or their relatives. The amount of compensation was around SEK 25 000 (€2800) per patient (County Councils' Mutual Insurance Company, 2011).

2.9.5 Public participation

The most important means of public participation in Sweden are the general elections held every fourth year. In the 2010 election almost 85% of those entitled to vote exercised their right to vote in the general elections at the national, county council and municipal levels (Election Authority, 2011). Of particular importance for health care are the elections at county council level, since the most important task of county councils is health care. Almost 90% of the county councils' budgets is allocated to health, medical and dental care (see chapter 3).

There are more than 100 patient and consumer organizations in the country representing different patient groups. The size of the organizations varies considerably. The largest organization (*Reumatikerförbundet*) has more than 60 000 members whereas the smallest (*Föreningen för Neurosedyskadade*) has less than 300 members. According to a survey among 60 of the organizations in Sweden, the most important aim of the organizations was to safeguard the interests of their members by means of influencing decision-makers (Virdeborn, 2006). The actual success in influencing decision-makers of course varies among the patient organizations and there is a lack of information about how influential such organizations have been in policy processes (Winblad & Ringard, 2009).

2.9.6 Patients and cross-border health care

Patients have the right to seek care at hospitals or with specialists (both private and public) throughout the country, irrespective of which county council or region they live in based on agreements between the county councils and the Ministry of Health and Social Affairs (see section 2.9.2 *Patient choice*).

3. Financing

Health care expenditure as a share of GDP was 9.9% in Sweden in 2009. Health care is regarded as a public responsibility and is largely tax-financed in Sweden. About 80% of all expenditures on health are public expenditures and about 17% are private expenditures, predominantly user charges. Both the county councils and the municipalities levy proportional income taxes on the population to cover the services that they provide. The principle of local self-government means that the county councils and regions may design and structure their activities with reference to local conditions. The county councils and the municipalities also generate income through state grants and user charges.

The mechanisms for paying providers vary among the county councils, but payments based on global budgets or a mix of global budgets, case-based and performance-based payment is commonly used in hospitals. Payment to primary care providers is generally based on capitation for registered patients, complemented with fee-for-service and performance-based payments. Physicians, nurses and other categories of staff, both publicly and privately employed, are predominantly salaried employees.

There are user charges for health care visits in both primary and specialist care in the form of flat-rate payments. The national ceiling, regulated by law, for OOP payments means that an individual will never pay more than SEK 1100 (€122) for health care visits within a period of 12 months. In almost all county councils, patients under 20 years of age are exempt from user charges. The county councils pay the full costs for all inpatient drugs. For reimbursed prescription drugs, the county councils receive a government grant that is negotiated at central level between the SALAR and the government. Patients

pay a part of the cost for prescription drugs according to a co-payment scheme. The national ceiling for prescription drug co-payments within a 12-month period is SEK 2200 (€244). For prescription drugs that are not subject to reimbursement as well as for OTC drugs, patients pay the full price.

3.1 Health expenditure¹

Health care expenditure as a share of GDP was 9.9% in Sweden in 2009 and has displayed an upward trend since 1995 (Table 3.1, National Health Accounts data). The substantial increase in expenditures as a share of GDP in 2009, which continued in 2010, is however due to a decrease in GDP rather than an increase in health expenditures. Total health expenditure as a share of GDP in Sweden is similar to that of Denmark but slightly higher than the other Nordic countries and the EU average (Fig. 3.1, Fig. 3.2). Sweden's health care expenditure (US\$ PPP) per capita was 3423 in 2009, which was slightly higher than the EU average (2877), lower than in Denmark (3630), but higher than in Finland (2979) (Fig. 3.3, WHO Health for All database).

Table 3.1

Trends in health care expenditure, 1995–2009

	1995	2000	2005	2008	2009
GDP, US\$ per capita	28 755	27 686	40 551	51 937	42 965
GDP, PPP US\$ per capita	21 911	27 726	32 298	37 424	–
Total health expenditure PPP US\$ per capita	1 739	2 284	2 952	3 622	3 690
Total health expenditure as % of GDP	8.0	8.2	9.1	9.2	9.9
Public expenditure on health as % of total expenditure on health	86.6	84.9	78.8	78.3	78.6
Private expenditure on health as % of total expenditure on health	13.4	15.1	17.4	16.8	16.6
Government health spending as % of total government spending	10.6	12.6	13.1	13.8	13.8
OOP payments as % of private expenditures on health	99.9	91.1	93.5	92.8	92.8
VHI as % of private expenditure on health	0.1	1.2	0.8	1.2	1.2

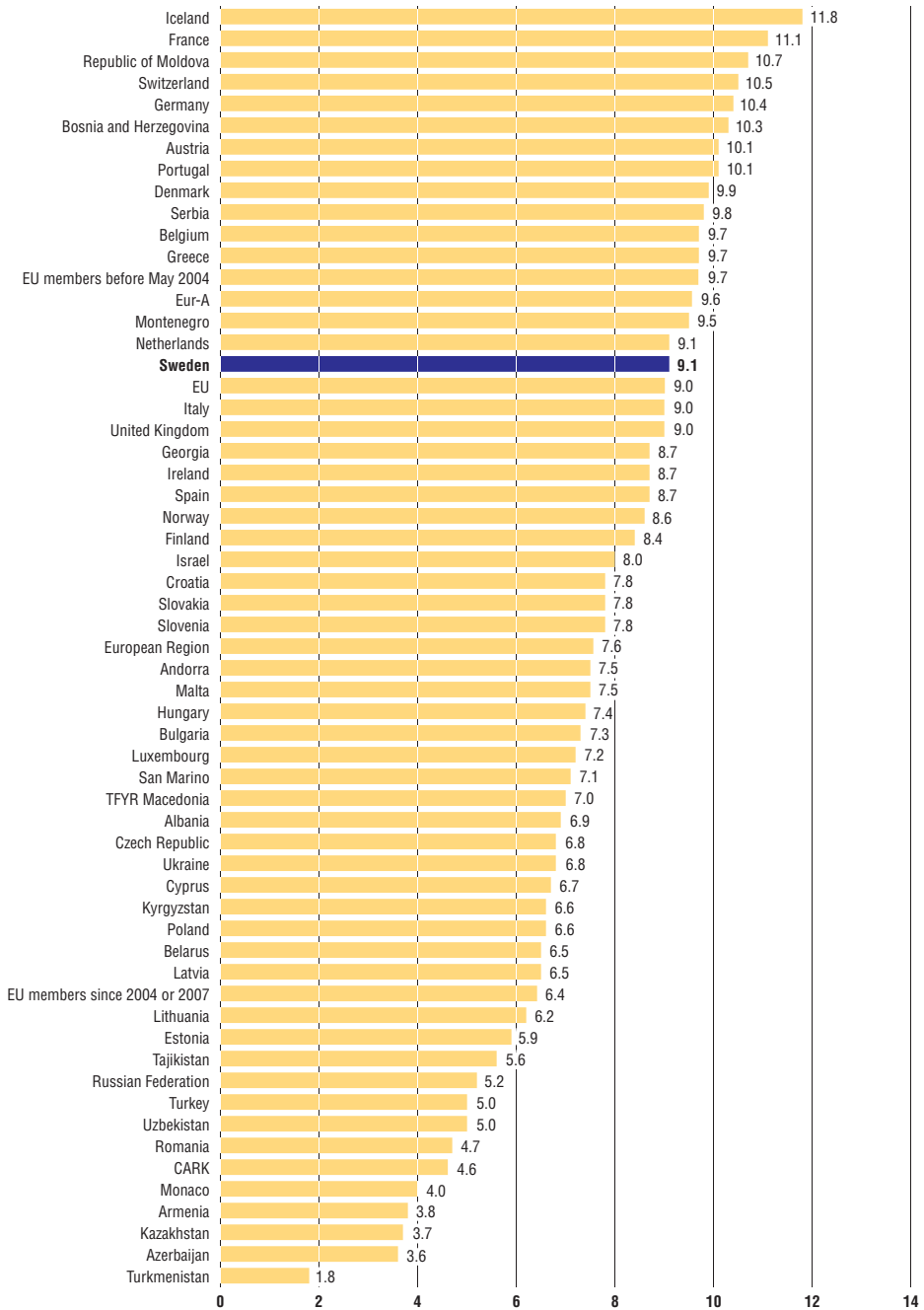
Source: WHO, 2012.

Note: This table provides updated data from the Global Health Expenditure database, which may differ from the Health For All database.

About 80% of all expenditures on health are public expenditures, with county councils' expenditures amounting to about 70%, municipalities' to about 8% and the central government's to about 2% of all health expenditures in 2009 (Statistics Sweden, 2010). Publicly financed health care as a proportion

¹ The data in the tables and figures in this section originate from different sources, calculated in slightly different ways. Therefore, the same measure might differ between tables. The estimates are, however, presented for different purposes – comparison over time or comparison across countries – and are consistent in this respect in each table.

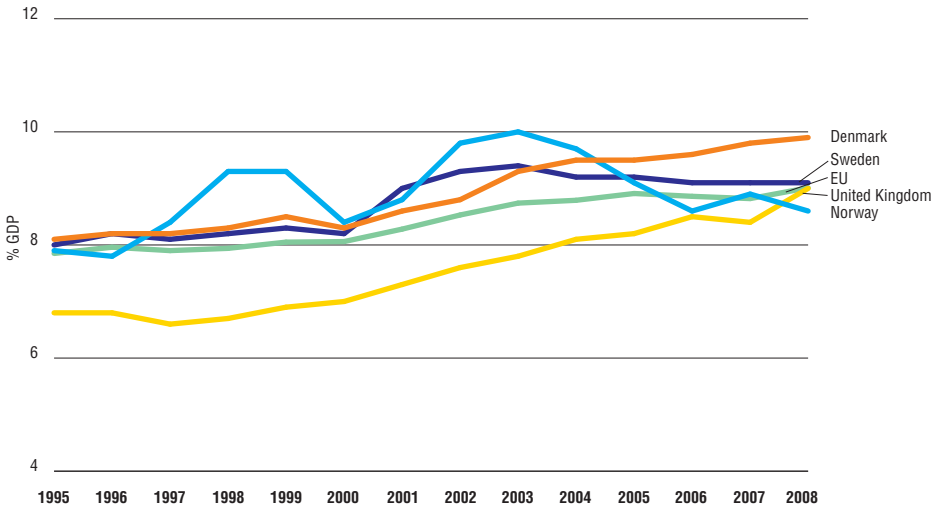
Fig. 3.1
Health expenditure as share (%) of GDP in the WHO European Region, 2008



Source: WHO Health For All

Fig. 3.2

Trends in health expenditure as a share (%) of GDP in Sweden and selected countries and averages, 1995–2008

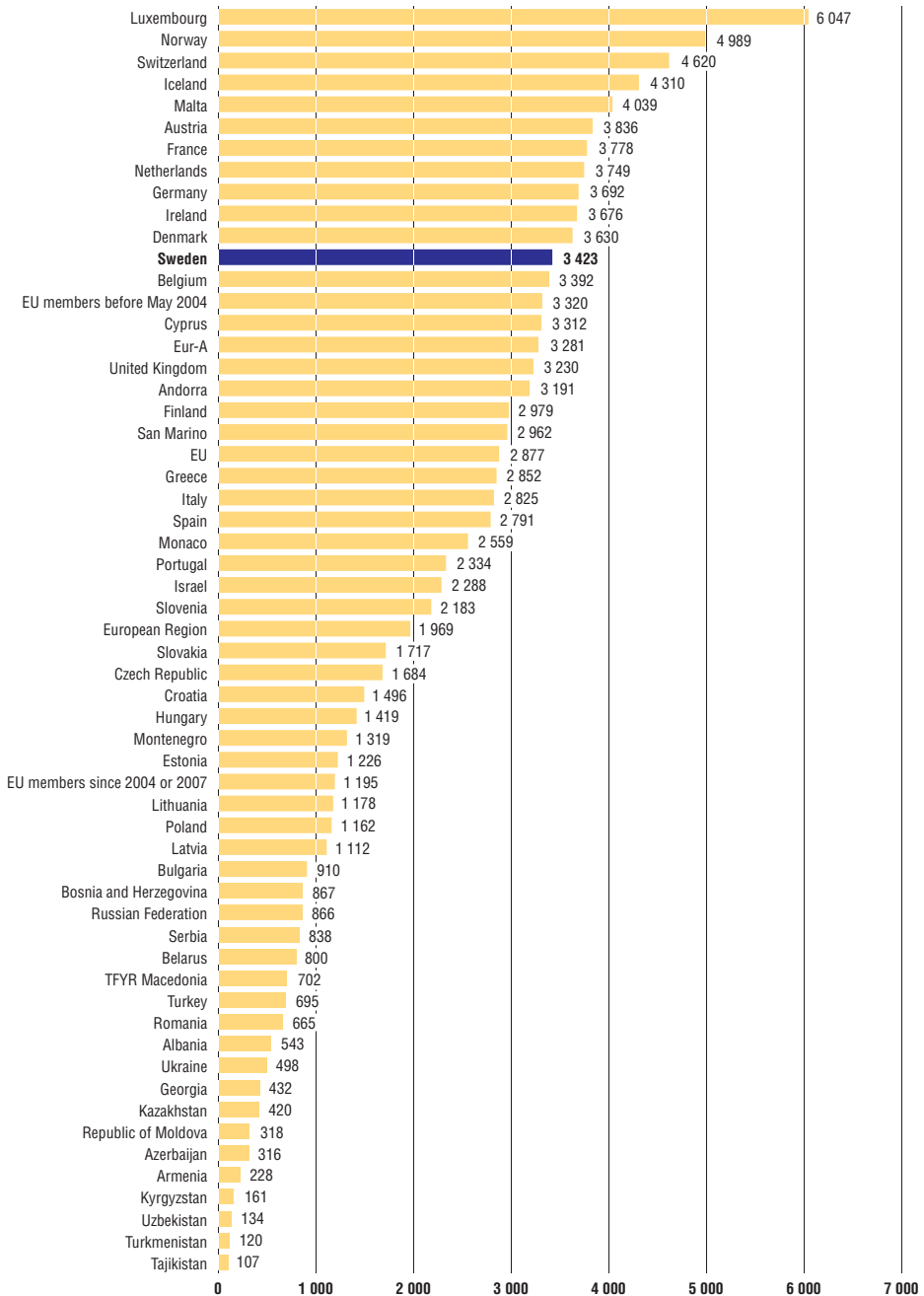


Source: WHO Regional Office for Europe, 2011.

of all health care has decreased over the last 20 years (Table 3.1). The share of public expenditures is slightly lower than in Denmark and Norway, but higher than in Finland and in line with the United Kingdom (Fig. 3.4).

The structure of health care expenditure is illustrated in Tables 3.2 and 3.3. The tables are based on data from System of Health Accounts (Statistics Sweden, 2010), and do not include information about psychiatric care or human resources. Total expenditures on health amounted to SEK 309 billion (€34 billion) in 2009, including expenditures for dental care and all care produced by the county councils and the municipalities and all pharmaceuticals. Outpatient and inpatient hospital care constitutes about two-thirds of total as well as public expenditures on health (Table 3.2). Pharmaceuticals account for about 10% of all public expenditures on health (Table 3.3). Capital formation amounts to about 4% of all public expenditures. The pace of investment has declined since 1980. One explanation for this is that the expansion phase of the 1970s has led to a mature health care infrastructure, although the need for replacement investment and associated investment plans has become more apparent in recent years. In addition, cost containment became an important issue in the 1980s. The county councils' expenditures for inpatient care within certain areas fell quite dramatically during the first half of the 1990s. One reason for this was

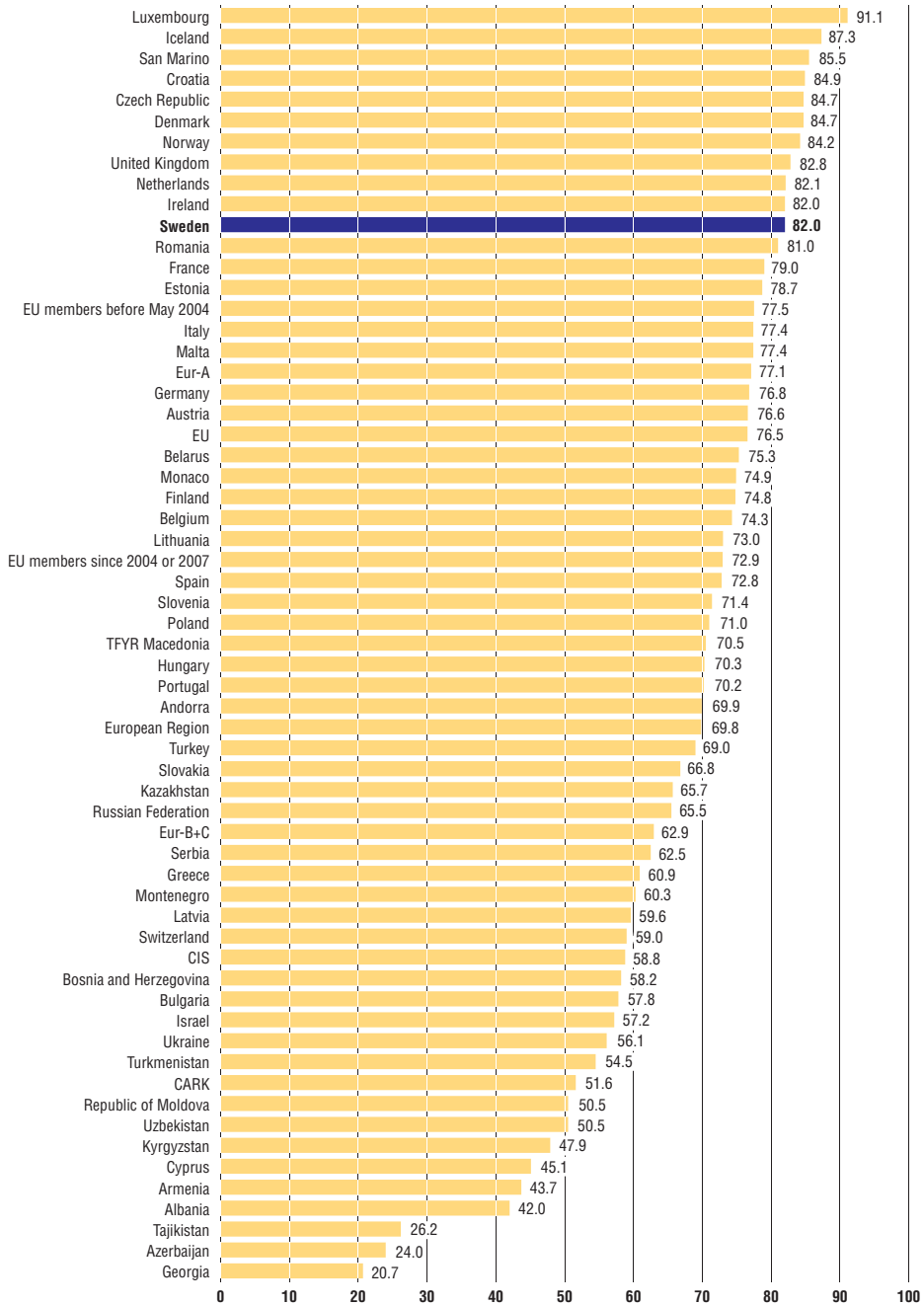
Fig. 3.3
Health expenditure in US\$ PPP per capita in the WHO European Region, 2008



Source: WHO Regional Office for Europe, 2011.

Fig. 3.4

Health expenditure from public sources as a percentage of total health expenditure in the WHO European Region, 2008



Source: WHO Regional Office for Europe, 2011.

the ÄDEL reform in 1992, whereby the responsibility for long-term inpatient health care and care for older people was transferred from the county councils to the municipalities (see section 2.2). Another reason was structural changes in the hospital sector during the 1990s, particularly during the first half. These changes followed the economic recession in the Swedish economy in the early 1990s, which led to pressure to contain costs in the public sector, including health care expenditures. As a result, there was a decrease in the number of beds (see section 4.1.2 *Infrastructure*) and nursing staff as well as a decrease in the ALOS.

Table 3.2

Public and total expenditure on health by service programme, 2009

	Public expenditure on health		Total expenditure on health	
	SEK millions	%	SEK millions	%
Health administration and insurance	4 173	1.7	4 173	1.3
Public health and prevention	8 836	3.5	11 265	3.6
Prescribed drugs	21 601	8.6	27 956	9.0
Medical services				
inpatient care	83 017	32.9	84 288	27.2
outpatient/ambulatory physician services	72 316	28.7	85 344	27.6
outpatient/ambulatory dental services	9 843	3.9	24 284	7.8
ancillary services	13 107	5.2	13 203	4.3
home or domiciliary health services	21 870	8.7	22 857	7.4
Capital formation of health care provider institutions	11 034	4.4	13 298	4.3
Not specified/other	6 051	2.4	22 897	7.4
Total expenditures on health	252 150	100.0	309 421	100.0

Source: Statistics Sweden, 2010.

Table 3.3

Public health expenditure on health by service input, 2005–2009 (in %)

	2005	2006	2007	2008	2009
Pharmaceuticals and other non-medical durables	10.2	10.0	9.7	9.4	9.0
where x% were prescribed medicines	9.7	9.4	9.1	8.9	8.6
Therapeutic appliances and other medical durables	1.5	1.5	1.4	1.4	1.4
Capital formation of health care provider institutions	3.6	3.4	4.0	4.5	4.4

Source: Statistics Sweden, 2010.

In fixed prices, the county councils' expenditures on health increased by 9% between 2005 and 2009. Expenditures for primary care increased by 14% and somatic specialized care by 13% during the period, whereas expenditures for psychiatric care increased by 7% and all other health care by 5% during the period (National Board of Health and Welfare, 2011a). The county councils spent SEK 197 billion (€22 billion) on health care in 2009 (about 91% of their total spending), where specialized somatic (inpatient and outpatient) hospital care accounted for 53% and primary care for 17%. Specialized psychiatric care accounted for 9% and dental care for 3% of the county councils' expenditures on health. Of the county councils' total expenditures in 2009, about 45% constituted costs for county council staff (salaries and other costs), 14% constituted costs for pharmaceuticals and medical materials, 12% procurement of health care services and 11% procurement of other services (SALAR, 2010a).

3.2 Sources of revenue and financial flows

The Swedish health care system is primarily funded through taxes (Fig. 3.5). Both the county councils and the municipalities levy proportional income taxes on their respective populations. The financing of health care services by local taxes is supplemented by the central government and by user charges. Subsidies for dental care are paid for by national social insurance, and the Swedish Social Insurance Agency generates revenues primarily through employer payroll fees (Fig. 3.6). Subsidies for prescription drugs are paid for through designated state grants to the county councils and then treated as a restriction on the county

Fig. 3.5

Sources of total county council revenue, 2009

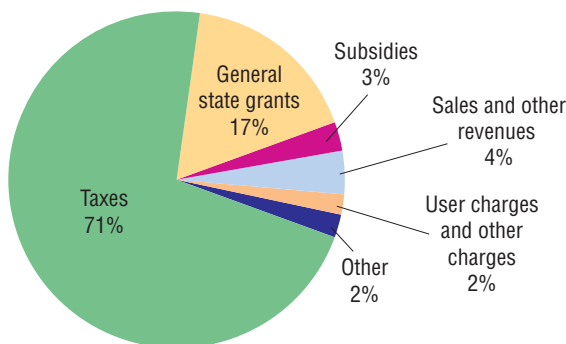
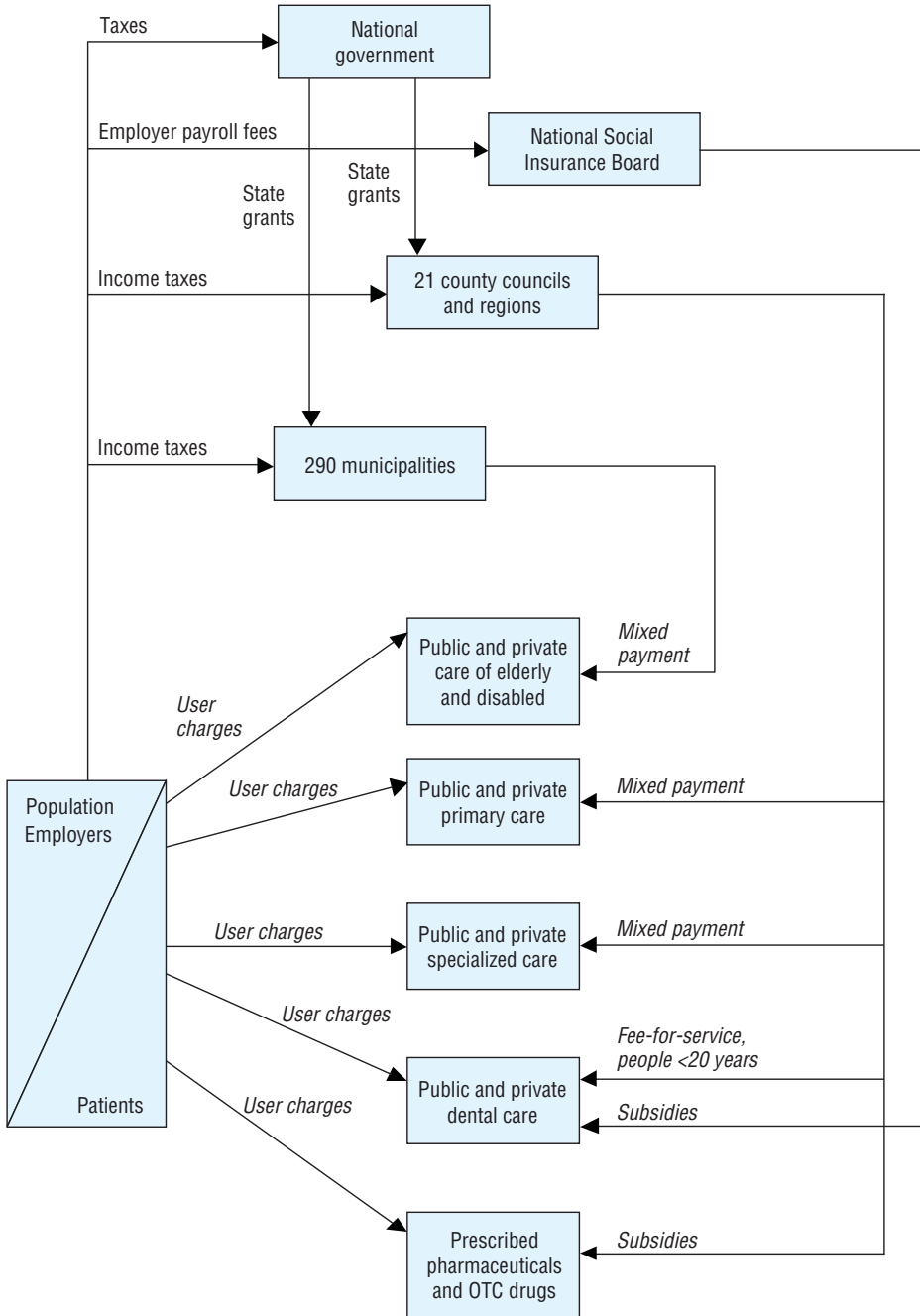


Fig. 3.6
Financial flows



councils' fee revenues (section 3.4). As the financial and political responsibility for health care is decentralized to the county councils, it is difficult to make precise connections between the sources of finance and different activities within the county councils. Most county council activities are financed through county tax revenues, but county councils are also responsible for other activities, such as regional transportation and cultural activities.

County council revenues amounted to SEK 257 billion (€29 billion) in 2009, where 71% originated from local taxes (SALAR, 2010a). County councils and municipalities also receive subsidies and state grants, which are financed through national income taxes and indirect taxes. State grants 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 re-allocates resources across municipalities and county councils 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 of funds*). Each municipality, county council or region can use this money on the basis of local conditions. Targeted grants must be used to finance specific activities, sometimes over a specific period of time. The major part of the subsidies takes the form of reimbursements for pharmaceuticals listed in the Drug Benefit Scheme. Sources of revenue have been stable over the past decade (Table 3.4).

Table 3.4

Sources of revenue as a percentage of total county council revenue, 1999–2009

	1999	2001	2006	2007	2008	2009
Taxes	68	72	72	72	71	71
General state grants	14	16	16	16	17	17
Subsidies	7	3	3	3	3	3
Sales and other revenues	5	4	4	4	4	4
User charges and other charges	3	3	3	3	3	2
Other	2	2	2	2	2	2

Source: SALAR, 2010a.

3.3 Overview of the statutory financing system

3.3.1 Coverage

According to the Health and Medical Services Act, the Swedish system provides coverage for all residents of Sweden, regardless of nationality. In addition, emergency coverage is provided to all patients from the EU and European Economic Area countries, 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. Three basic principles are intended to apply to health care in Sweden. The principle of human dignity means that all human beings have an equal entitlement to dignity, and should have the same rights, regardless of their status in the community. The principle of need and solidarity means that those in greatest need take precedence in medical care. The principle of cost-effectiveness means that 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. 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.

3.3.2 Collection

It is the local authorities that decide the levels of the local income taxes and as a result the level of taxation varies between different county councils and municipalities. Administratively, taxes are collected from employers by the national tax authority (*Skatteverket*). The highest total level of taxation (municipal and county council taxes) was 34.17% (in Ragunda municipality) compared to the lowest level which was 28.89% (in Vellinge municipality). The average level of local taxation in the country was 31.55% in 2011 compared to 31.56% in 2010. The average county tax rate was 10.82% in 2011, and the average municipal tax rate was 20.73% in the same year (Statistics Sweden, 2011b). There are no earmarked taxes for health or health care services, which makes it difficult to specify precisely what proportion of the taxes is directly

connected with the provision of these services. About 91% of the county councils' total expenditures constituted expenditures on health care in 2009 (SALAR, 2010a).

3.3.3 Pooling of funds

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 county councils with equal economic conditions for their activities. Through this system, revenues of the municipalities, county councils 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 conditions to offer an equal level of services across the country.

The equalization system is managed by the Ministry of Finance. In 2010, general state grants amounted to about SEK 70 billion (€0.8 billion) allocated to municipalities and county councils/regions, where about SEK 13 billion (€1.4 billion) were reallocations between county councils, regions and municipalities and the remainder was paid for by the state (Governmental Offices of Sweden, 2011). In addition to the tax equalization system there is a system of reallocation of funds between county councils to pay for certain very expensive pharmaceuticals, for example, for treatment of rare diseases and HIV/AIDS, on the principle of solidarity of funding. Also, this system is administered by the state together with the allocation of funds for drugs included in the drug benefits scheme.

3.3.4 Purchaser and purchaser–provider relations

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

In the early 1990s, several county councils 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, payment was made according to the volume of activities. Dalarna, Stockholm and Bohus were the first county councils to introduce reforms that included a purchaser–provider split, resource allocation

to purchasers according to the needs of the residents, negotiated contracts and per-case payment schemes to providers, and total cost responsibility for providers through the use of internal transfer prices for services. Furthermore, the roles of politicians and professionals were redefined: politicians were required to act as representatives of the patients (through purchasing organizations) and health professionals were made responsible for the provision of health care. Several county councils introduced solutions in which separate purchasing organizations were established. The hospitals became more independent in relation to political bodies and, in some cases, were transformed into county council-owned limited companies.

Having introduced a model with an internal split between purchasers and providers, some county councils returned to traditional models of planning and control during the mid 1990s, whereas others continued with separate purchasing organizations. Different models are thus in operation in different county councils.

Also, the number of private providers differs between different county councils and, moreover, has shifted over time. In some county councils with initial plans of privatization of several hospitals, such as Skåne and Stockholm, hospitals that had been transformed into county council-owned limited companies in the late 1990s were transformed back to county council boards again after the 2002 election. Also in primary care, the number of private providers varies across county councils. The number of private primary care providers has, however, increased continuously following different primary care reforms (see sections 2.8.2 *Regulation and governance of providers* and 2.9.2 *Patient choice*), which has led to new purchaser–provider relations in this area.

A private health care provider must have an agreement with the county council in order to be reimbursed. If the private provider does not have an agreement, the provider is not publicly reimbursed and 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 county councils but based on earlier state regulation and national tariffs (*nationella taxan*). This survival from an old system operates in parallel with more recently adopted principles for payment to private providers as determined by the county councils. For hospitals, the purchasing organizations negotiate with hospital health care providers and establish financial and activity contracts. These contracts are often based on fixed prospective per-case payments (based on DRGs) and complemented with price or volume ceilings and quality components. Prices are

determined by historical costs and negotiated between purchasers and providers at the county council level. The use of DRGs and other classification systems, however, varies among regions and county councils. Per-case reimbursements for outliers, such as complicated cases that grossly exceed the average cost per case, may be complemented by per-diem payments (see section 3.6.1 *Paying for health services*).

In primary care, following the laws adopted in connection with choice reform in 2010 (see section 2.8.2 *Regulation and governance of providers* and 2.9.2 *Patient choice*), 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 primary care providers applies to all providers fulfilling the requirements for accreditation by the local county councils. Payment to primary care providers is regulated through conditions for accreditation. The requirements primarily focus on minimum clinical competences represented in the primary care unit. In most county councils, fixed prospective payment in the form of capitation for registered patients is practised (see section 3.6.1 *Paying for health services*).

3.4 OOP payments

Private expenditures as a proportion of total expenditures on health accounted for about 17% in 2009, where 93% were OOP payments (Table 3.1).

3.4.1 Cost-sharing (user charges)

There are direct user charges for health care visits in both primary and specialist care in the form of flat-rate payments. In 2009, the county councils received SEK 6186 million (€687 million) in patients' fees and other fees (with SEK 2781 million (€309 million) for dental care), which accounted for 2.4% of the county councils' total revenues. County councils determine the level of the user charges for primary and hospital care.

In 2011, the fee for consulting a physician in primary care varied between SEK 100 (€11) and SEK 200 (€22) across the county councils. The fee for consulting a specialist at a hospital varied between SEK 230 (€25) and SEK 320 (€35) the same year (see Table 3.5). In almost all county councils, children and young people (under 20 years of age) are exempt from patient fees for health care as well as for dental care. At primary care clinics, vaccinations, health examinations and consultations, and certain types of treatment are provided

Table 3.5

User charges for health services, 2011

Health service	Type of user charge in place	Exemptions and/or reduced rates	Cap on OOP spending regulated by government
Primary care	Co-payment determined by each CC, between SEK 100 (€11) and SEK 200 (€22)	<20 years old exempt in most CCs	Maximum OOP of SEK 1 100 (€122) for all health care visits within a 12-month period
Outpatient specialist visit	Co-payment determined by each CC, between SEK 230 (€25) and SEK 320 (€35)	<20 years old exempt in most CCs	
Outpatient prescription drugs	Patient pays full cost up to SEK 1 100 (€122), then decreasing co-payment levels, uniform throughout country	<20 years old exempt in most CCs	Maximum co-payment is SEK 2 200 (€244) for 12-month period
Inpatient stay	Co-payment determined by each CC, approximately SEK 80 (€9) per day	<20 years old exempt in all CCs	Reductions: Vary across CCs. Fees reduced depending on income, age (>65 years old) or length of stay in nine CCs
Dental care (treatment)	Patient pays up to SEK 3 000 (€333) then partial subsidy	<20 years old exempt in most CCs	Decreasing co-payment levels as subsidy increases, but no cap
Technical devices	Co-payments uniform throughout country		Maximum co-payment is SEK 2 000 (€220) for 12-month period

Note: CC: county council.

free of charge to all children of school age. At the ante-natal primary care clinics, regular check-ups are given free of charge during the entire pregnancy. User charges for inpatient care are separate from other user charges. Patients above 20 years of age are charged about SEK 80 (€9) per day of hospitalization with some minor differences across county councils.

User charges for prescription drugs and dental care and high-cost protection schemes for health care visits are regulated by national law. The national ceiling for OOP payments regulates the maximum amount that an individual will pay within a period of 12 months. From January 2012, the national ceiling for OOP payments for health care visits is SEK 1100 (€122). When the cost ceiling has been reached, the patient pays no further charges for the remainder of the 12-month period, calculated from the date of the patient's first visit to a physician. In practice, the ceiling constitutes a restriction on the county council fee revenues.

The ceiling for individual co-payments for prescribed drugs is separated from the other health care services and is administered by the TLV. Co-payments for prescribed drugs are uniform throughout the country. The patient has to pay the full cost for prescribed drugs, up to SEK 1100 (€122), after which level the subsidy gradually increases up to a 100%. The patient pays 50% of the cost between SEK 1101–2100 (€122–233), 25% of the cost between SEK 2100–3900 (€233–433) and 10% of the cost between SEK 3900–5400 (€433–600). Within a 12-month period, the maximum co-payment is SEK 2200 (€244) for prescribed drugs. For a household, all children are covered by the same high-cost protection scheme for prescription drugs, that is, SEK 2200 (€244) maximum for all children within the same household during a 12-month period. The ceiling for patients' fees for medical devices is SEK 2000 (€220). In practice, the ceiling constitutes a restriction on the county council fee revenues. County councils receive designated prospectively decided state grants for subsidies for prescription drugs.

Since the dental care reforms in 1999, 2002 and 2008 (see section 6.1.6 *Changes in subsidies and co-payments for pharmaceuticals and dental services*) there are two types of subsidies for dental services. A fixed general annual subsidy is paid for preventive dental care and general examination of SEK 300 (€33) for people aged 20–29 years, SEK 150 (€16) for people aged 30–74 years and SEK 300 for people aged 75 years and over. For other dental care services, there is a separate high-cost protection scheme for each 12-month period. Patients pay the full cost up to SEK 3000 (€333) and then get the following subsidy: 50% of costs for services with a price between SEK 3000 and 15 000 (€1667) and 85% of costs for services with a price above SEK 15 000 (€1670). In contrast to outpatient visits and prescription drugs, there is no absolute cap on user charges for dental care. The subsidies for dental care are included in national health insurance, and financed by the Swedish Social Insurance Board. The subsidies subject to the high-cost protection scheme are based on reference prices determined by the TLV. There is price competition between dentists. Should they demand a higher price for a certain service than the reference price determined by the TLV, patients have to pay the difference between the reference price and the price charged by the dentist out of pocket (not included in high-cost protection scheme).

With regard to services for older and disabled people there is a separate maximum co-payments fee for services provided in the municipal sector (see section 5.8). In 2011, the maximum fee was SEK 1712 (€190) per month (see section 6.1.6 *Changes in subsidies and co-payments for pharmaceuticals and dental services*).

The size of patient fees as a proportion of total costs have been fairly stable during the past decade for both primary and hospital care as well as for pharmaceuticals (Table 3.6). A downward trend can be observed for dental care, however, following the reforms during the late 1990s and 2000s.

Table 3.6

User charges for health services as a percentage of costs, 2001–2009

	2001 ^a (%)	2005 (%)	2009 (%)
Primary care (excl. prescription drugs)			
Patient fees/total costs of primary care	4.12	4.04	3.71
Somatic specialized care (excl. prescription drugs)			
Patient fees/total costs	1.86	1.67	1.48
Psychiatric care (excl. prescription drugs)			
Patient fees/total costs	1.68	1.41	1.30
Outpatient dental care (incl. minors under 20)			
Patient fees/total costs	66.95	64.32	59.47
Pharmaceuticals			
Patient fees/total sales of prescription drugs	24.09	24.69	25.91
Patient fees + OTC sales/total sales of drugs (prescription, inpatient, OTC)	27.56	27.39	27.85

Sources: National Board of Health and Welfare (pharmaceuticals); Statistics Sweden, SCB (dental care) and the SALAR (the rest).

Note: ^a year 2003 for pharmaceuticals.

3.5 VHI

3.5.1 Market role and size

The market for VHI in Sweden is small compared to other European countries. Private insurance in health care is supplementary. The main reason for having private individual insurance is to be able to get quick access to a specialist in ambulatory care and to avoid waiting lists for elective treatment. VHI in Sweden is however mainly linked to occupational health services as the great majority of all private insurance is paid for by employers. In 2000, about 103 000 people had private health care insurance compared to 382 000 people in 2010. Private insurance funding of health care amounted to about SEK 700 million (€80 million) in 2009. This corresponds to 0.2% of total funding (OECD, 2011).

Since 2004, a voluntary insurance or pre-payment scheme has been available across public dental services for young adults. The purpose has been to promote continued basic dental services with an emphasis on prevention. At least in some county councils, the scheme has been described as a success.

From July 2010 the insurance scheme is available for all adults and across public dental services throughout the country. Monthly payment varies by age and established risk-group.

3.5.2 Market structure

In 2010, 82% of all VHI was paid for by employers. Another 12% was insurance for groups of employees paid for by the employees themselves and the remaining 6% was individual private insurance (Swedish Insurance Federation, 2011). Most major commercial insurance companies offer VHI as part of their general services. For employers, VHI is a non-deductible expense. For the employee, VHI is generally a non-taxable benefit.

3.6 Payment mechanism

3.6.1 Paying for health services

The Swedish health care system is integrated to a high degree. The county councils are responsible for both the financing and organization of health care services. There are few private hospitals, and the number of private primary care providers varies widely between the county councils. In some urban county councils, up to 60% of the primary care providers may be private, whereas in other county councils only a few private providers can be found. The same variation in the public/private mix of providers can be found across the municipalities.

For private practitioners to be reimbursed by the county council they need to have an agreement with the county (see section 2.8.2 *Regulation and governance of providers*).

It is up to each county council to decide on the mechanisms for paying providers and therefore methods vary across the country. In hospital care, a mix of payment mechanisms is used across the country. Traditionally, most county councils have decentralized a great deal of the financial responsibility to health care districts, through global budgets. There has been a development towards mixed resource-allocation models during the 2000s. Often, fixed prospective per-case payments (based on DRGs), complemented with price or volume ceilings and quality components are used. The use of DRGs and other classification systems for payment varies among regions and county councils. Per-case reimbursements for outliers, such as complicated cases that grossly exceed the average cost per case, may be complemented by per-diem payments.

The payments, whether they are based on fixed per-case payments, per-diem reimbursements, global budgets, fee-for-service methods or a combination of these systems, are traditionally based on historical (full) costs.

Some county councils have developed pay-for-performance (P4P) programmes for hospitals in more recent years covering up to 4% of hospital payment. In general, the programmes are designed to withhold payment if certain targets are not met. Targets may be related to general indicators covering waiting times, preventive care or patient safety but may also be linked to clinical indicators in major disease areas.

In primary care, following the reform focusing on choice and privatization (see section 6.1.4 *More choice of provider and privatization in primary care*) a combination of fixed payment in the form of capitation (fixed prospective payment for registered patients), variable payment based on visits, and performance-based payment based on fulfilment of certain goals has been used for allocating resources to providers. Two overarching models for paying providers are used in practice. In Stockholm county council about 40% of the payment is based on capitation whereas more than 55% is variable, based on visits by registered and non-registered patients and about 3% of the payment is performance-based. In all other county councils more than 80% (up to 98%) of the total payment is based on capitation. The remainder consists of variable payments based on visits, primarily for non-registered patients, and a small proportion (2–3%) of performance-based payment (Table 3.7) (Anell, 2011). In county councils where performance-based payment is used, this is linked to fulfilment of usually fewer than 20 targets. Examples of indicators used to determine targets include accessibility to providers, preventive services, patient satisfaction (results from surveys), registration in national registers (e.g. diabetes), and compliance with the recommendations from the county councils drug formulary committee.

Table 3.7

Provider payment mechanisms

Providers/payers	Central government	County councils	Cost-sharing
Primary care		C 80–90%, FFS 5–10%, P4P 2–3%	4%
Hospital inpatient	P4P	Case based, PD, P4P	1–2%
Hospital outpatient	P4P	Case based, PD, P4P	1–2%
Dentists		FFS 40%	60%

Source: Anell, 2011

Note: CC Stockholm: C 40%, FFS 50%. Capitation – C; fee-for-service – FFS; per diem – PD; salary – S; case payment – e.g. DRGs.

3.6.2 Paying health workers

Most health workers across both public and private providers and independent of service sector (hospitals, primary care providers, 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 110 000 registered nurses, midwives, biomedical scientists and radiographers. The Swedish Medical Association (*Sveriges läkarförbund*) is the union and professional organization representing physicians. About 90% or 43 000 of Sweden's doctors were member of the organization in 2011. 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 county councils and municipalities (see section 2.3.1 *National level*).

A full week's work is 40 hours. In 2010, the average monthly salary for staff employed by the county councils was SEK 56 600 (€6300) for physicians, SEK 42 200 (€4700) for dentists and about SEK 29 000 (€ 3200) for specialist nurses. This includes compensation for work during non-regular working hours (Statistics Sweden, 2011c).

4. Physical and human resources

Sweden allocates more physical resources to the health sector than most other OECD countries. Highly specialized care is concentrated in seven public university hospitals. In addition, there are about 70 public hospitals at the county level, six private hospitals and over 1100 public and private primary care units throughout the country. There were about 25 500 hospital beds in Swedish hospitals in 2009, with slightly more than 4400 in specialized psychiatric care, about 20 000 in specialized somatic care in county council hospitals and about 1100 in private hospitals. The number of acute care hospital beds was 2.2 per 1000 population in 2005, which is below the EU average (3.97) during the same year. As in many other countries the number of hospital beds per capita in Sweden has fallen since the 1970s related to structural changes in the health care sector.

In 2008, there were about 35 000 registered physicians (non-retired) and 115 000 registered nurses (non-retired) in Sweden working in the county council, municipal and private sectors. About 70% of all physicians have a specialist degree. Almost one-quarter of all specialist physicians are specialists in general medicine. Universities and colleges are directly accountable to the central government in Sweden. Medical education is entirely financed by the state. The training of physicians, nurses, dentists and other medical staff is linked to the university hospitals and other relevant parts of the medical services. The National Board of Health and Welfare is the licensing authority for health care staff. In 2008, Sweden had 3.7 practising physicians per 1000 population, compared to an EU average of 3.3. Also, the number of practising nurses per 1000 population of 10.8 was above the EU average of 7.9.

4.1 Physical resources

4.1.1 Capital stock and investments

There is a mix of publicly and privately owned health care facilities in Sweden, but they are generally publicly funded. Highly specialized care, requiring the most advanced technical equipment, is concentrated in seven (public) university hospitals located in Malmö/Lund, Gothenburg, Linköping, Stockholm (Huddinge), Uppsala, Umeå and Örebro. There are also about 70 public hospitals at the county level, 6 private hospitals and over 1100 public and private primary care units throughout the country.

Capital investments are generally decided upon and funded by the local county councils. With a few exceptions, there have been no investments in new hospital buildings since 1980 until the past few years when several new hospital buildings have been planned and built. The rapid pace of capital investments in health care during the 1960s and 1970s declined in the 1980s. One explanation for this decline was that the expansion phase up to the 1970s led to mature health care infrastructure in the 1980s. Then, in the 1990s, the psychiatric and the ÄDEL reforms transferred the responsibility and provision of care for a large proportion of patients from the inpatient hospital setting to the outpatient care setting and the municipalities. Facilities are generally well maintained although the buildings in many cases are more than 20 years old.

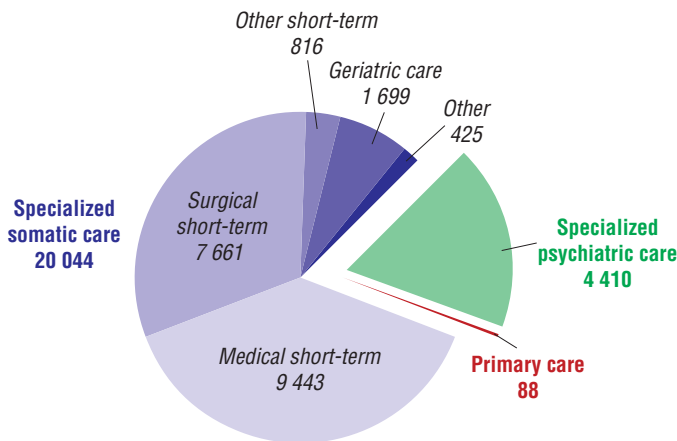
Currently, instead of fixing poorly maintained buildings, hospital buildings are being planned and built to meet changes in health care demands and structures in the provision of health care, such as more outpatient care and day care. In several cases, it would be more expensive to keep rebuilding and renovating existing buildings to meet the demands for new forms of care than to build new ones (Lövrup, 2011). The largest ongoing investment is the building of a new Karolinska hospital in Stockholm, estimated at SEK 14.1 billion (€1.6 billion), which should be finalized in 2016. The project is financed through a public–private partnership between the Stockholm county council and the company Swedish Hospital Partners AB, owned by the Swedish construction company Skanska Infrastructure Development and the British investment fund Innisfree.

4.1.2 Infrastructure

There were about 25 500 hospital beds in Swedish hospitals in 2009, with slightly more than 4400 in specialized psychiatric care and about 20 000 in specialized somatic care in public hospitals (Fig. 4.1) and about 1100 in private hospitals. At the end of the 1960s, there were about 120 000 hospital beds. There has been a continuous decrease in the number of hospital beds since the 1970s. Structural changes continued in the 1990s, with a shift from hospital inpatient care towards outpatient care and primary care, and when the municipalities took over the responsibility for long-term care in 1992 in connection with the ÄDEL reform. The number of hospital beds was 50 000 after the ÄDEL reform.

Fig. 4.1

Mix of beds in primary care, specialized somatic care and specialized psychiatric care in public hospitals, 2009



Source: SALAR, 2010a.

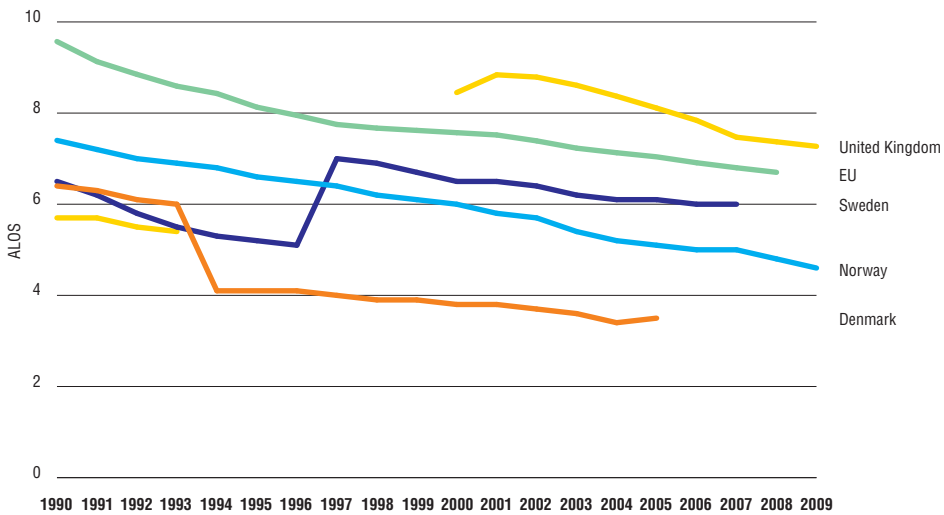
The decrease in hospital beds has continued during the 2000s but at a slower pace. Structural changes in the 2000s have focused more on the concentration of highly specialized care and a division between emergency care and other care. The reduction in beds during the period 2005–2009 has primarily been in beds for somatic care, whereas the number of psychiatric beds has remained fairly stable and has even increased slightly since 2007 (SALAR, 2010a; National Board of Health and Welfare, 2010e).

The ALOS was 4.6 days per episode of care in 2008, which is a decrease of 0.4 days since 1998 (National Board of Health & Welfare, 2010b). Diseases of the circulatory system accounted for 18% of all episodes of care and are

thereby the largest organ-specific group. The ALOS differs between county councils from 3.9 days in Dalarna to 5.7 days in Blekinge. In comparison with other countries the ALOS in acute care hospitals is lower in Sweden compared to the United Kingdom but higher than in Norway and Denmark (Fig. 4.2). The number of inpatient surgical procedures is also lower in Sweden than the EU average.

Fig. 4.2

ALOS, acute care hospitals only, in selected countries, 1990–2009



Source: WHO Regional Office for Europe, 2011.

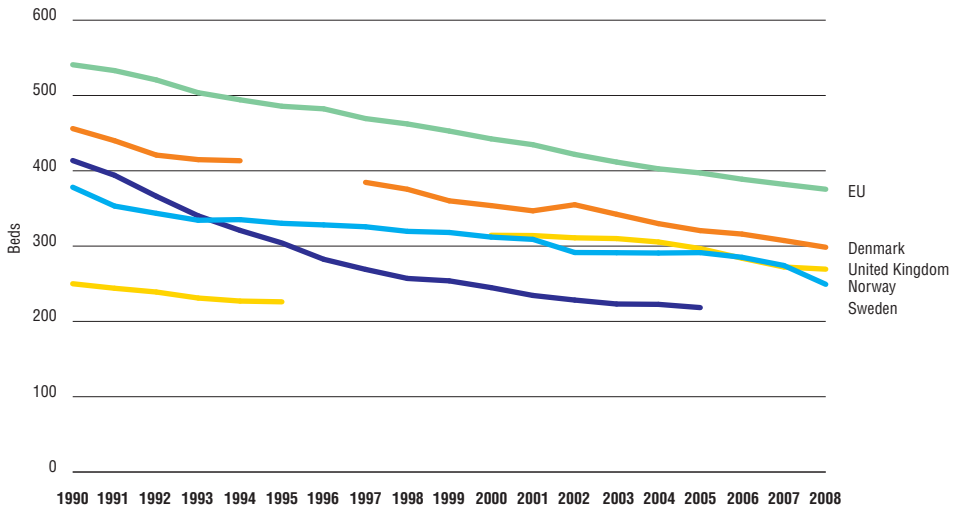
Since an increasingly large proportion of care is provided in the outpatient setting, it is not anticipated that the ALOS for care episodes in the inpatient setting will continue to decrease. Approximately 560 000 day cases of surgery were produced in 2008. The number of day cases as a percentage of all care episodes (inpatient and outpatient) was almost 30% in 2008. Most day cases of surgery involve surgery of the skin and cataract surgery. Cataract surgeries are almost exclusively performed in the outpatient setting (day surgery). Also, this proportion differs between county councils. The highest proportion of day cases can be found in Blekinge, Halland, Skåne and Stockholm, in that order (National Board of Health and Welfare, 2010b).

The number of beds in acute hospitals per inhabitant has decreased since the early 1900s in Sweden. The total number of beds in acute hospitals was reduced by almost 50% between 1990 and 2005 (Fig. 4.3). There have also been

similar structural changes in the other Nordic countries, but the reduction has been more prominent in Sweden and the number of beds in acute hospitals in Sweden is lower than in Denmark and Norway and compared to the EU average.

Fig. 4.3

Beds in acute hospitals per 100 000 population in Sweden and selected countries, 1990–2008



Source: WHO Regional Office for Europe, 2011.

4.1.3 Medical equipment

There are no national up-to-date statistics available regarding items of functioning diagnostic imaging technologies (e.g. MRI, CT, PET) per 1000 population. Nonetheless, the adoption and use of medical technologies, including new medical equipment, is high in Sweden. According to a report by the Swedish Council on Technology Assessment in Health Care (2001) all university hospitals, most county council hospitals and several primary care facilities had MRI equipment in 2001.

4.1.4 Information technology

Access to, and use of computers and the Internet is high amongst the Swedish population. More than 90% of the population had access to the Internet in their home in 2010. Among companies, almost 100% of those employing at least 10 people have access to the Internet.

Regarding health information, all county councils and most hospitals and primary care facilities have web pages where information (publicly and privately provided) about health care services can be found (see sections 2.7.1 *Information systems* and 2.9.1 *Patient information*). These pages contain information about where to seek care in the event of ill health or injury, and about the different hospitals and health care facilities that are available. There is also a national publicly initiated collaborative project led by the SALAR (www.1177.se) and a privately initiated project led by the Confederation of Swedish Enterprise (www.omvard.se) where comparative information about health care providers is disseminated through the Internet (see section 2.9.1 *Patient information*).

Several different IT systems operate in the Swedish health care sector (see section 2.7.1 *Information systems*). Generally, both the quality of such systems and their levels of use in hospitals and primary health care facilities are high. Usually patients' records are kept electronically. More than 90% of primary care providers use electronic patient records for diagnostic data (Health Consumer Powerhouse, 2009). Also, the use of e-prescriptions is becoming increasingly common and in 2009 more than half of all Swedish prescriptions were e-prescriptions (Health Consumer Powerhouse, 2009).

It is up to every hospital to select and procure its own preferred IT system. In several county councils, efforts are made towards harmonizing patients' records across all hospitals in the county. There are also ongoing projects at the national level, aimed at integrating (and making compatible) the various information systems used, with the purpose of increasing the security and effectiveness within the systems. These projects have been initiated as a result of concern about the fragmentation of IT systems in Swedish health care (see chapter 6).

4.2 Human resources

4.2.1 Health workforce trends

The number of health care staff per inhabitant decreased during the early and mid 1990s but has increased since then. The main reason for the reduction during the 1990s was the structural change over this period, which led to a reduction in hospital beds as well as in the ALOS at hospitals. As the responsibility of care for older people was shifted from the county councils to the municipalities, there was a general reduction in the number of primarily unlicensed medical staff and a large number of unlicensed medical staff was transferred from the county council to the municipal sector.

Health care staff in the county council sector are predominantly licensed staff, such as physicians and nurses, whereas staff in the municipal sector are predominantly unlicensed medical staff, such as assistant nurses. In 2010, about 170 000 and 195 000 people, respectively, were employed by the county councils and the municipalities in the area of health, medical care and long-term care. Among the county council staff, about 17% were physicians, 42% nurses and 30% assistant nurses. Among the municipal staff, about 7% were nurses, whereas 83% were assistant nurses and other unlicensed staff (SALAR statistics www.skil.se). Since the late 1990s, there has been an increase in the number of licensed health care staff per inhabitant, that is, an increased number of physicians and nurses in the county council sector (Table 4.1).

Table 4.1

Health workers in Sweden per 1 000 population, 1995–2008

	1995	2000	2005	2008
Physicians	289	308	350	372
Specialists in general medicine (GP)	48	53	59	62
Other specialist physicians	162	170	191	201
Nurses	964	991	1 070	1 097
Midwives	65	68	72	72
District nurses	137	145	151	147
Dentists	87	81	82	81
Pharmacists (<i>apotekare och receptarie</i>)	–	–	8 106	8 571
Psychologists	–	–	7 488	8 021

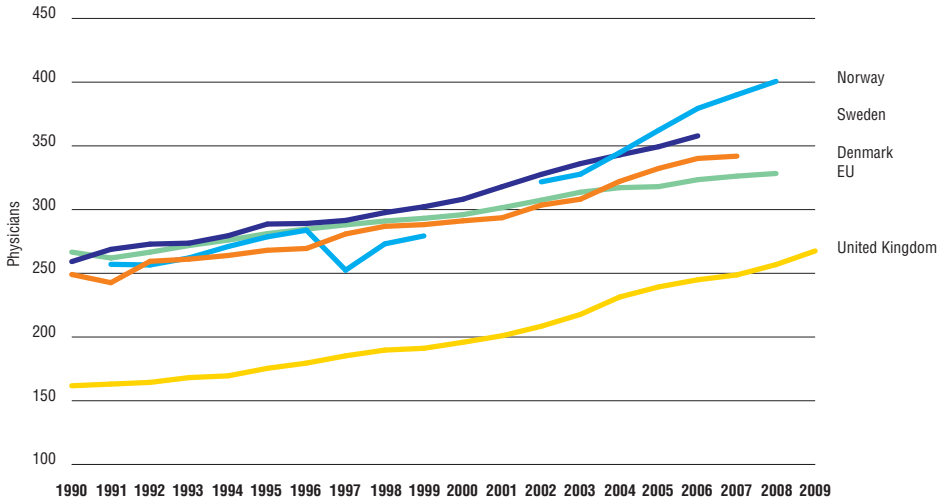
Source: National Board of Health and Welfare, 2011b.

In 2008, there were about 35 000 registered physicians (non-retired) and 115 000 registered nurses (non-retired) in Sweden working in the county council, municipal and private sectors (National Board of Health and Welfare, 2010d). According to the Swedish Medical Association, which represents about 90% of Sweden's doctors, about two-thirds of its members worked in the hospital setting and 17% in the primary care setting in 2009. About 8% worked in the private health care sector and about 8% worked outside the health care sector, for example, in a pharmaceutical company (Swedish Medical Association, 2010).

The number of physicians per inhabitant is higher than in Denmark but lower than in Norway (Fig. 4.4). Since the mid 1990s the number of physicians per inhabitant has continuously increased from 289 to 372 per 100 000 population

Fig. 4.4

Number of physicians per 100 000 population in Sweden and selected countries, 1990–2009



Source: WHO Regional Office for Europe, 2011.

between 1995 and 2008 (Table 4.1). This corresponds to an increase of nearly 30%. The number of physicians per inhabitant was in line with the EU average until the late 1990s and thereafter it has been increasingly higher in Sweden.

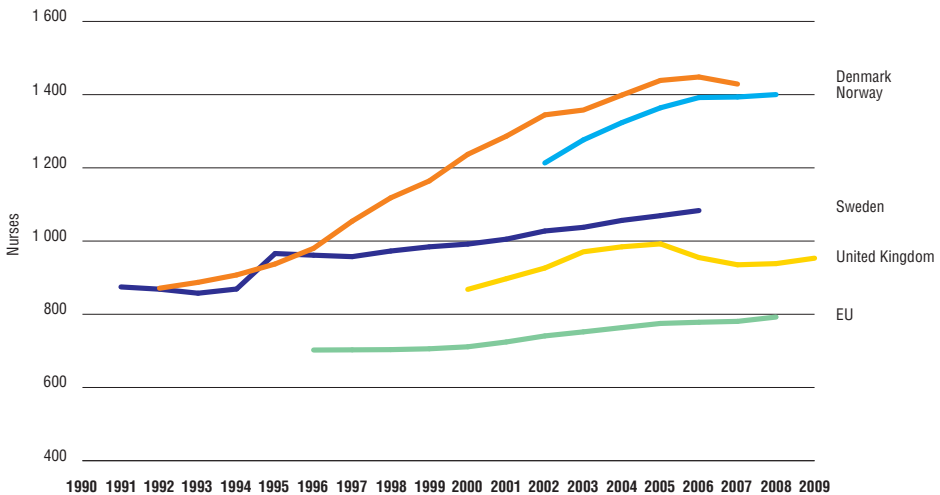
About 70% of all physicians have a specialist degree. Almost one-quarter of all specialist physicians are specialists in general medicine. The terms “general practitioner”, “family physician” and “district physician” vary depending on the prevailing local political and organizational decisions, but all refer to specialists in general medicine within primary care.

The proportion of female physicians is continuously increasing in Sweden and was about 43% in 2008 compared to 38% in 2004 (National Board of Health and Welfare, 2010d). Although the most common specialist physicians are specialists in general medicine, there is a shortage of physicians in primary care. This has led to solutions with private companies offering so-called “physicians for hire” (*hyrläkare*) to primary care providers, which in turn has led to problems with the continuity of care in relation to patients. There is also a shortage of specialists in geriatric care and this shortage is expected to worsen as the proportion of older people continues to grow (National Board of Health and Welfare, 2011a).

The number of nurses per inhabitant has increased slightly since the mid 1990s and was almost 1100 per 100 000 inhabitants in 2008 (Table 4.1). It is, however, lower than both Denmark and Norway although higher than the EU average and the United Kingdom (Fig. 4.5 and Fig. 4.6). Almost 90% of all nurses are women (National Board of Health and Welfare, 2010d). The increase in the number of nurses per inhabitant between 1995 and 2008 was about 14% for all nurses whereas it was about 7% for district nurses. District nurses play a central role in Swedish health care, as many first contacts with the health care system are their responsibility. District nurses work both in the county council sector within the primary care setting and in the municipal sector. The salary for district nurses is higher in the municipal sector than in the county council sector since the municipalities compared to the county councils experience difficulties in attracting staff in general and licensed staff in particular (see section 5.8).

Fig. 4.5

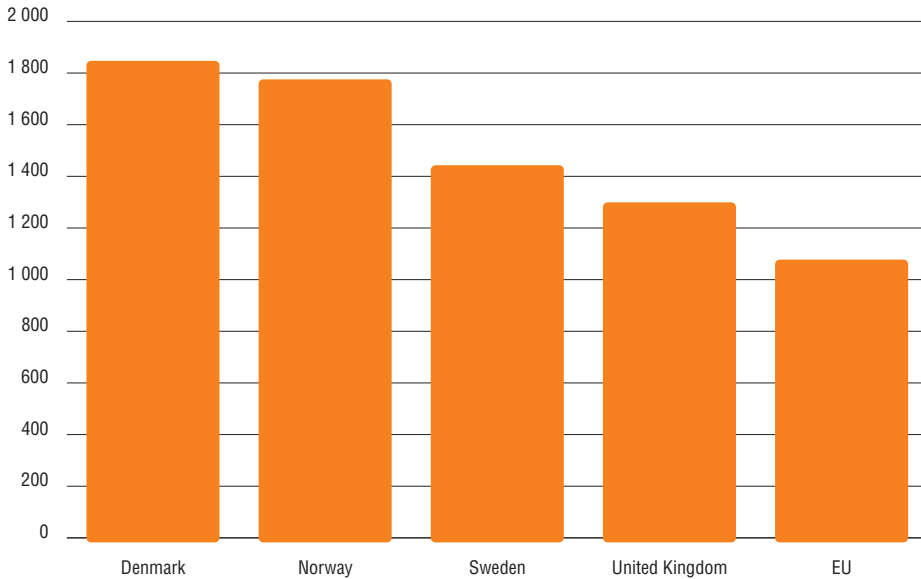
Number of nurses per 100 000 population in Sweden and selected countries, 1990–2009



Source: WHO Regional Office for Europe, 2011.

Fig. 4.6

Number of physicians and nurses per 100 000 population in Sweden and selected countries, latest available year



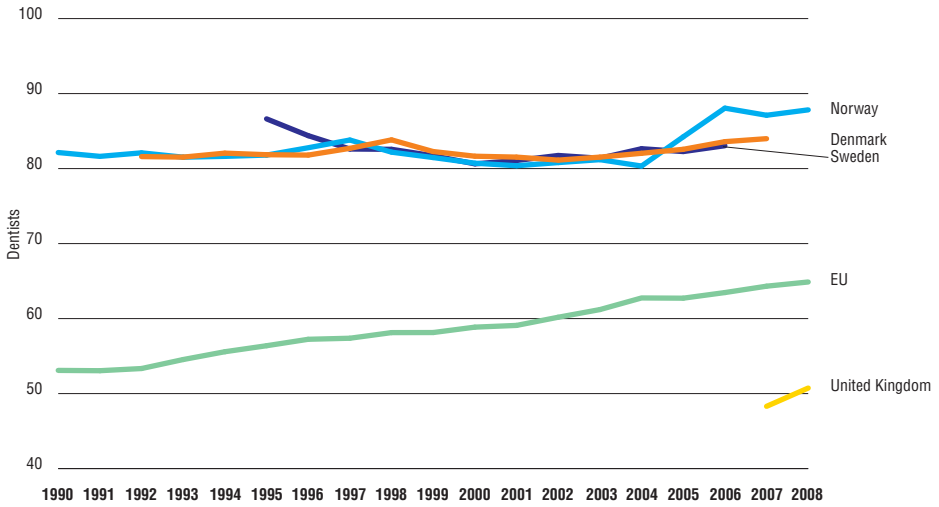
Source: WHO Regional Office for Europe, 2011.

Note: Data is from the following years – Denmark (2007), Norway (2008), Sweden (2006), United Kingdom (2009), EU (2008).

The number of dentists per inhabitant has been stable during the period 1995–2008 in Sweden and is higher than the EU average, in line with Denmark and slightly lower than Norway (Fig. 4.7). About half of all dentists are women in Sweden. There has been an increase in the number of dental hygienists from 3500 to 4000 per 100 000 inhabitants between the years 2004 and 2008. About 98% of all dental hygienists are women (National Board of Health and Welfare, 2010d).

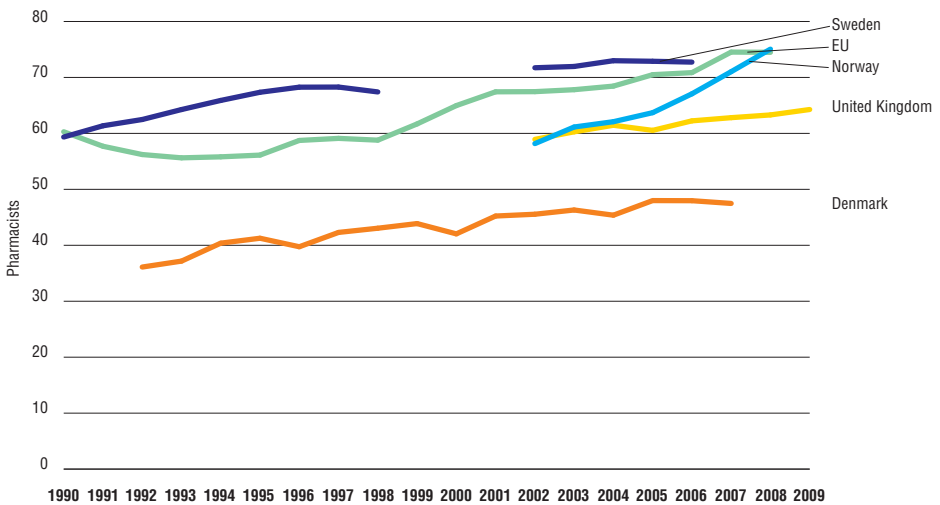
The number of pharmacists per inhabitant is higher in Sweden than in the other Nordic countries and compared to the EU average (Fig. 4.8). During the last five years the number of pharmacists has shown an upward trend (Table 4.1).

Fig. 4.7
 Number of dentists per 100 000 population in Sweden and selected countries, 1990–2008



Source: WHO Regional Office for Europe, 2011.

Fig. 4.8
 Number of pharmacists per 100 000 population in Sweden and selected countries, 1990–2009



Source: WHO Regional Office for Europe, 2011.

4.2.2 Professional mobility of health workers

In 2009, approximately 2000 physicians were granted a licence to practise medicine in Sweden, of whom half had been educated in Sweden and half abroad (Swedish Medical Association, 2010). During the period 2000–2008, between 1.6% and 2.1% of all physicians stopped practising medicine and started working in other areas each year. The corresponding figures for nurses were between 1.8% and 2.1% (National Board of Health and Welfare, 2010c).

Between 2000 and 2008, about 5% of all licences for nurses were granted to people educated in other countries, corresponding to 170 nurses on average each year. During the same period, about 400 nurses emigrated to another country and about 250 previously emigrated nurses returned to work in Sweden each year (National Board of Health and Welfare, 2010c).

4.2.3 Training of health workers

Universities and colleges are directly accountable to the central government in Sweden. The National Agency for Higher Education (*Högskoleverket*) is the authority responsible for providing the government with information on which to base decisions regarding the planning of education at the universities. The Agency's responsibilities include assessing current and future demand for different staff categories. There are 52 institutions offering higher education in various forms in Sweden. The majority of universities and university colleges are public authorities, subject to the same legislation and regulations as other public authorities in Sweden, in addition to the particular statutes, ordinances and regulations relevant to the higher education sector (National Agency for Higher Education, 2011).

In Sweden, medical education is entirely financed by the state. The training of physicians, nurses, dentists and other medical staff is linked to the university hospitals and other relevant parts of the medical services. The National Board of Health and Welfare is the licensing authority for health care staff. After completing study and training programmes, physicians, nurses, dentists, pharmacists and other licensed health service staff can apply for a licence to practise their professions at the National Board of Health and Welfare. The licences are not granted for a specific period of time, that is, health care personnel do not have to re-apply in order to keep their licence.

There are seven universities authorized to educate physicians in Sweden: in Lund, Gothenburg, Linköping, Stockholm (Karolinska Institute), Uppsala, Umeå and Örebro. Approximately 1600 students were admitted to medical

school in 2011 (National Agency for Higher Education, 2011). For admission to a university medical school, graduation from secondary school with subjects that include natural science is required. To become a registered physician, a student must successfully complete a study programme of five and a half years, and after that, a 21-month training period in general medical care, followed by a written examination. Most physicians choose to specialize within any of the approximately 60 recognized specialist fields, which requires another five years of studying and training in the relevant area.

Nurses are educated at approximately 30 universities, university colleges and independent programme providers located throughout the country. Approximately 5000 students are admitted to the nursing programme every year (National Board of Health and Welfare, 2010c). To become a registered nurse, a student must complete a study programme of three years, including one or two periods of training. After having worked for a period of at least one year, nurses can continue with specialist training which lasts for 40–60 weeks. Nurses can choose among 10 recognized specialist areas, for example, midwifery, intensive care and anaesthesiology.

Dentists are trained at the universities of Gothenburg, Stockholm (Karolinska Institute), Umeå and Malmö. 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 five years and includes both theoretical and practical training. About 275 students are admitted to the study programme each year.

4.2.4 Career paths for physicians and other health workers

Broadly speaking, physicians and other health care staff can undertake a clinical career, an academic career or a combination of both. Most 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.

In the past, physicians holding managerial posts were commonly appointed based on their academic careers and/or academic positions, for example, as a professor at a university. Moreover, until the late 1990s only physicians were allowed to become clinical 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 clinical directors. Since then, an increasing proportion of health care workers holding managerial posts have another professional background than as a physician, most often a nursing background. Approximately one-third of all clinical directors were non-physicians in Swedish public hospitals in 2005 (Granstrand, 2005). The most prominent change, however, has taken place within the primary care setting, where about half of all clinical directors were nurses in 2008 (Kennedy, 2008). It has also become less important to have an academic or research background in order to become a clinical director at a hospital. Physicians and nurses who move into managerial posts often stop working in clinical practice instead of combining their managerial responsibility with clinical work and academic research.

5. Provision of services

Most welfare services are carried out at regional and local levels in Sweden. The county councils manage the health care services, while the municipalities manage areas such as compulsory and upper secondary education, pre-school, care for older people, roads, water, waste and energy. Sweden adopted a national public health policy in 2003, which states that public authorities should be guided by the 11 objective domains of the policy, covering the most important determinants of Swedish health.

Since 2005, there has been a new care guarantee in Sweden, which aims at strengthening the patient's position, improving accessibility and ensuring equal access to elective care in different parts of the country. The guarantee is based on the "0-7-90-90" rule – meaning instant contact (zero delay) with the health care system for consultation; seeing a GP within 7 days; consulting a specialist within 90 days; and waiting for no more than 90 days after being diagnosed to receive treatment. The guarantee applies to the whole country and also includes all elective care in the county councils.

One important aim behind structural changes in Swedish health care since the 1990s has been a shift from hospital inpatient care towards outpatient care and primary care. Primary health care involves services that do not require advanced medical equipment and is responsible for guiding the patient to the right level within the health system. Choice of primary care provider for the population and freedom of establishment for primary care providers accredited by the local county councils is mandatory in Sweden, since January 2010.

Specialized somatic care involves health care services provided at hospitals requiring medical equipment or other technologies that cannot be provided in the primary care setting. In Sweden, a relatively large proportion of the resources available for medical services have been allocated to the provision of care and treatment at hospital level. Hospitals are grouped into county council

hospitals and regional/university hospitals. There are 7 regional/university hospitals and about 70 county council hospitals, offering specialized inpatient and outpatient somatic and psychiatric care. About two-thirds of the county council hospitals are acute care hospitals, where care is offered 24 hours a day and a larger number of clinical expert competences are represented than in local hospitals. Highly specialized care is provided at regional/university hospitals. Swedish counties are grouped into six medical care regions with seven regional/university hospitals to facilitate cooperation and to maintain a high level of advanced medical care.

There are about 1200 pharmacies throughout the country, distributing prescription and non-prescription drugs to the population and to hospitals and other health services. Since October 2002, the TLV has had the responsibility of deciding whether a prescription drug or specific product should be subsidized and included in the reimbursement scheme. The TLV makes its decisions primarily based on the cost-effectiveness of various products. Moreover, generic substitution for prescription drugs was introduced in 2002. It is the MPA that decides which drugs are interchangeable.

5.1 Public health

Most welfare services, including public health initiatives, are produced in the public sector. The county councils and regions manage the health care services, while the municipalities manage areas such as compulsory and upper secondary education, pre-school, care for older people, roads and water, waste and energy. Sweden adopted a national public health policy in 2003, which states that public authorities should be guided by the 11 objective domains of the policy, covering the most important determinants of Swedish health (see section 2.6). These include:

1. participation and influence in society
2. economic and social prerequisites
3. conditions during childhood and adolescence
4. health in working life
5. environments and products
6. health-promoting health services
7. protection against communicable diseases
8. sexuality and reproductive health

9. physical activity
10. eating habits and food
11. tobacco, alcohol, illicit drugs, doping and gambling.

The policy was updated in 2008 (Act on the System of Choice in the Public Sector), adding greater elements of individual choice and responsibility. The renewed public health bill focuses particularly on children, young people and older people. Special emphasis is put on initiatives aimed at strengthening and supporting parents in their parenting role, increasing suicide prevention efforts, promoting healthy eating habits and physical activity, and reducing the use of tobacco (Swedish National Institute of Public Health, 2011).

Programmes designed to prevent accidents and ill health have been successful in Sweden. Deaths due to traffic accidents have been continuously reduced since the 1970s. In 1997, the Swedish government adopted a so-called “zero-vision”, aspiring to no deaths or serious injuries caused by road traffic. The number of traffic-related deaths decreased from 16.2 to 3.8 deaths per 100 000 inhabitants between 1970 and 2009.

The number of daily smokers has decreased substantially during the past 30 years. The proportion of daily smokers among men in Sweden is lower than in any other European country. The reduction in the number of daily smokers has been achieved partly by the adoption of non-smoking campaigns and tax increases on tobacco.

Also, programmes and treatments to prevent mortality due to breast cancer have been successful, resulting in a decrease from 32.8 to 25.9 deaths per 100 000 inhabitants between 1993 and 2009 (see section 1.4). Women over the age of 40 and those aged 25 years, respectively, are offered the chance to take part in screening programmes against breast and cervical cancer. Men over the age of 50 years are usually offered a PSA-test to detect cancer of the prostate. Moreover, screening against aortic aneurysm and colon cancer is being implemented in several county councils.

All women are offered regular health checks, screening, psychological support and education throughout their pregnancy and almost all women participate in the programme. In Sweden, maternal and child mortality is among the lowest in the world. Special attention is given to identifying and helping women who are socially vulnerable, for example, at risk of violence. All

newborn babies are tested for phenylketonuria. Regarding child immunization, all parents are offered vaccination against 10 serious diseases for their children free of charge and the coverage rate is very high in Sweden (see section 1.4).

The Swedish Institute for Infectious Disease Control is responsible for surveillance of communicable diseases and analysis of the current epidemiological situation in Sweden (and internationally). The surveillance is carried out in close collaboration with the County Medical Officers of Communicable Disease Control. The basis for the surveillance is the registration of the notifiable diseases specified in the Communicable Disease Act of 1998. According to the Act, a physician is obliged to notify cases of 54 communicable diseases grouped into: diseases dangerous to society (e.g. diphtheria, hepatitis, cholera and rabies), sexually transmitted diseases (such as gonorrhoea and HIV), and other notifiable diseases (such as malaria and measles). These pathogens are notifiable, in parallel, to the Swedish Institute for Infectious Disease Control and the County Medical Officers, by both clinicians and laboratories (see section 2.7.1 *Information systems*).

5.2 Patient pathways

Since 2005, there has been a new care guarantee (*vårdgaranti*) in Sweden, which was incorporated into national legislation through an amendment in the Health and Medical Services Act in 2010. The guarantee aims at strengthening the patient's position, improving accessibility and ensuring equal access to care in different parts of the country. The guarantee is based on the “0–7–90–90” rule – meaning instant contact (zero delay) with the health care system for consultation; seeing a GP within 7 days; consulting a specialist within 90 days; and waiting for no more than 90 days after being diagnosed to receive treatment. The guarantee has been part of national legislation since 2010 and applies to the whole country; it also includes all elective care in the county councils.

In Sweden, a woman in need of a hip replacement would typically take the following steps:

The first visit would be with the primary care provider where she has chosen to be registered. According to the care guarantee, she should access a primary care physician within seven days but typically she will get an appointment within one or two days. She would pay between SEK 100 (€11) and SEK 200 (€22) for the visit, depending on which county council area she lives in. The primary care physician would refer her to a hospital specialist, in this case an

orthopaedic specialist. As there is no formal gate-keeping role of primary care in most county councils, she may alternatively, and depending on availability, contact a specialist directly.

She can choose any hospital (public or private) she prefers if she does not want to go to the hospital nearest to her home. Information about waiting times and some parameters regarding quality of care are available for her through the SALAR's web site. According to the care guarantee, she should not have to wait more than a maximum of three months to see a specialist. After she has seen the specialist she might have to wait up to another three months for her planned surgery.

If she wants to jump any waiting list she can access a private provider and pay for her treatment out of pocket or through a VHI plan. Few people have a VHI, however, especially among older people (see section 3.5.1 *Market role and size*).

After the surgery, she will stay at the hospital until she is fully medically treated. The responsible physician, together with staff from social care services, staff from other outpatient services and the patient herself, then develop a care plan. Thereafter, the responsibility for her need for care, rehabilitation and/or assistance lies with the municipality where she resides. She will, however, have check-ups with a primary care physician at the primary care facility where she is registered.

5.3 Primary care

Choice of primary care provider for the population and freedom of establishment for providers accredited by the local county councils is mandatory in Sweden since January 2010. Patients can register with any public or private provider accredited by the local county council and registration based on latest visit or shortest geographical distance is practised in most county councils for individuals who do not make an active choice of provider (see section 2.9.2 *Patient choice*). Irrespective of registration, however, primary care has no formal gate-keeping role in most county councils and patients are free to contact specialists directly. There are more than 1100 primary care units throughout the country, with about one-third being privately owned. The proportion of private primary care units varies substantially between the county councils. In Stockholm, Halland and Västmanland about half of all units are privately owned,

whereas only a few private primary care units exist in other county councils, such as Jämtland and Västernorrland, in the less densely populated middle and northern parts of the country (Swedish Competition Authority, 2010b).

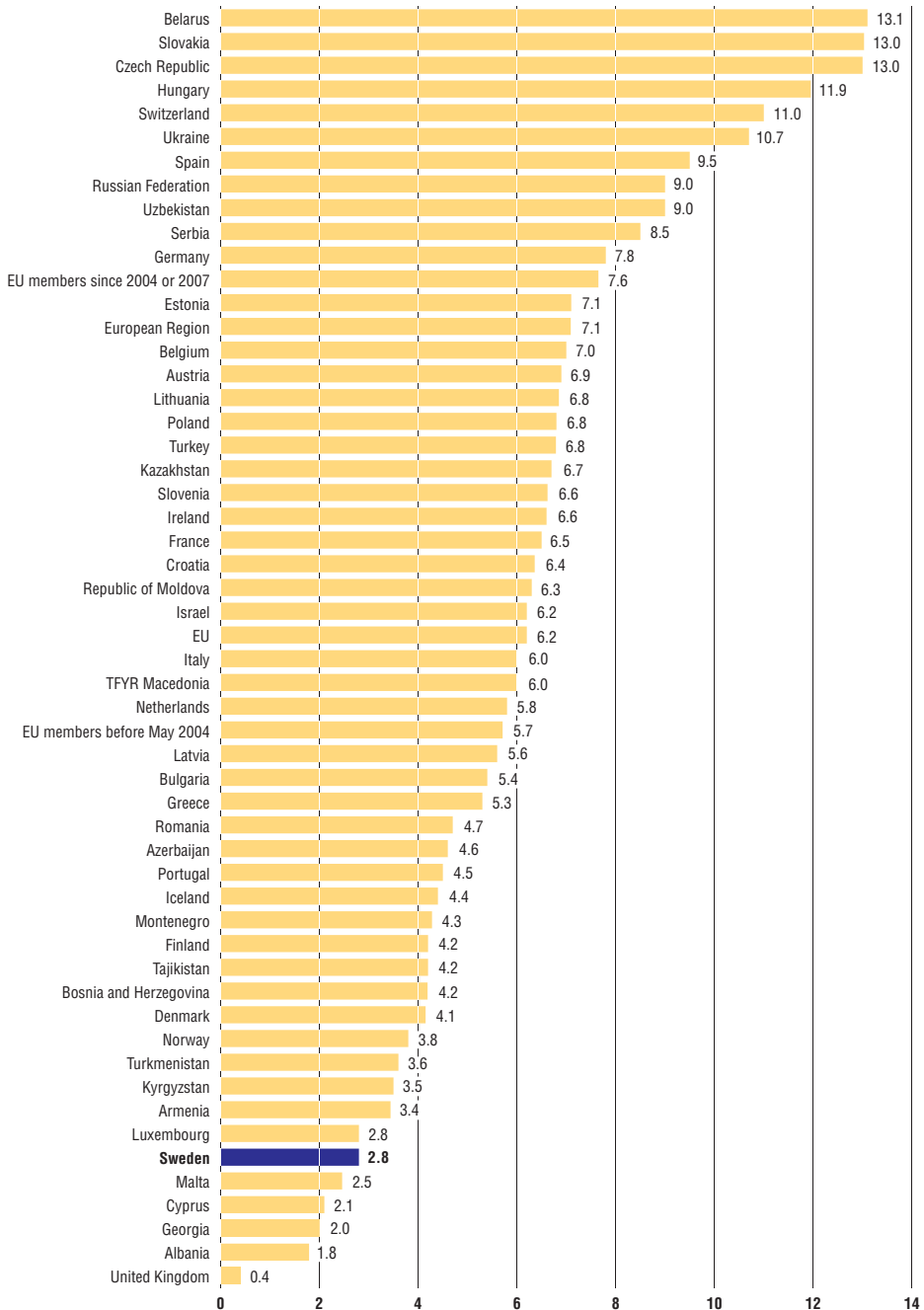
Primary care involves services that does not require advanced medical equipment and is responsible for guiding the patient to the right level within the health system. GPs, nurses, midwives, physiotherapists, psychologists and gynaecologists provide treatment, advice and prevention at this level of care. Team-based primary care facilities with four to six GPs, complemented with other staff categories, is the most common form of primary care practice in Sweden. Private practices with only one GP exist but are rare. Primary care services include vaccination programmes for children, health examinations and consultations, as well as certain types of treatment. The GP usually provides the first health service contact for adults or older people who have mainly physical health problems or minor mental health problems. People with more serious mental health problems usually seek care within specialized psychiatric services directly. In many cases, the GP also provides the first health service contact for children, although this function is shared with paediatricians (hospital outpatient contact) and district nurses.

District nurses play a special role, as many first contacts with the health care system are their responsibility. District nurses work both within primary care and within the municipal sector. District nurses, employed by the municipals, are involved in home care, and regularly make home visits, especially to older people. They have limited rights to prescribe pharmaceuticals. However, they do not have sole medical responsibility, but act under the supervision of physicians.

One important aim behind structural changes in Swedish health care since the 1990s has been a shift from hospital inpatient care towards outpatient care at hospitals and primary care, respectively (see section 4.1.2 *Infrastructure*). The number of doctor visits per person in primary care increased by more than 10% between 2005 and 2009. During 2009 the average number of outpatient doctor visits in primary care and at hospitals per person was 2.8 in Sweden (Fig. 5.1). This number is lower than in the other Nordic countries despite the increase during the past years. Slightly more than half of the visits occurred in primary care and the remainder in the outpatient hospital setting (National Board of Health and Welfare, 2011a). Primary health care accounted for about 17% or SEK 33 billion (€3.7 billion) of the county councils' total health care expenditures in Sweden in 2009.

Fig. 5.1

Outpatient contacts per person per year, latest available year



Source: WHO Regional Office for Europe, 2011.

In 2009, there were approximately 40 million primary care visits in Sweden (14 million of these were with GPs), corresponding to 4.3 primary care visits per person. The visits can be divided into 1.5 visits with a GP at a primary care facility, 2.67 visits with other staff (predominantly a nurse) at a primary care facility, and 0.14 home-based visits by a GP or other staff. Children up to 6 years old made on average 3.5 health care visits during 2009 (SALAR, 2010a).

5.4 Specialized somatic care

Specialized somatic care involves health and medical services requiring medical equipment or other technologies that cannot be provided in the primary care setting but requires treatment at the hospital level. In Sweden, a relatively large proportion of the resources available for medical services have been allocated to the provision of care and treatment at hospital level. About 53% of the county councils' total health care expenditures, or SEK 104 billion (€11.5 billion), was allocated to specialized somatic care in 2009. Approximately 6% of all specialized somatic care was privately provided.

Structural changes in specialized care during the past two decades have focused on a shift from hospital inpatient care towards hospital outpatient care and day care, a concentration of highly specialized care and an emphasis on separating emergency care from other care. Inpatient care expenditures amounted to about SEK 61 billion (€7 billion), outpatient care to about SEK 36 billion (€4 billion), day care to about SEK 6 billion (€0.7 billion) and home-based care to about SEK 1 billion (€0.1 billion). Almost 17 million outpatient visits were produced in 2009 and one-fifth of these were privately provided. A majority of the visits (almost 11 million) were with a specialist physician other than in primary care. About 1.5 million inpatient care episodes were produced in 2009 (SALAR, 2010a).

Public hospitals are grouped into county council hospitals and regional/university hospitals. There are 7 regional/university hospitals and about 70 hospitals at the county council level, offering specialized inpatient and outpatient somatic and psychiatric care. County council hospitals can be divided into acute care hospitals and local hospitals. About two-thirds of the county council hospitals are acute care hospitals. In acute care hospitals, care is offered 24 hours a day and a larger number of clinical expert competences are represented than in local hospitals. There are six private hospitals in Sweden, of which three are non-profit-making (Sophiahemmet, Ersta and Red Cross (*Röda Korset*) hospital in Stockholm), and three are profit-making (St Goran hospital

located in Stockholm, Lundby hospital located in Gothenburg and Simrishamn hospital located in the south of Sweden). The three former are privately owned and operated but have contracts with the county council of Stockholm and provide care to a certain number of patients each year paid for by the county council. The three latter are privately owned but fully financed by the county councils, based on contracts. St Goran hospital is the only private acute care hospital in Sweden.

Highly specialized care is provided at regional/university hospitals. Swedish counties are grouped into six medical care regions with seven regional/university hospitals to facilitate cooperation regarding tertiary medical care and to maintain a high level of advanced medical care. All regional/university hospitals have advanced medical equipment and offer highly specialized care. One reason for concentrating highly specialized care in seven hospitals is to maintain high levels of clinical competence. This is achieved by gathering a large number of patients with rare and or severe conditions or diseases in a few hospitals, instead of treating a small number of these patients at several hospitals. Each region serves a population averaging more than 1 million people. There is currently a tendency towards concentrating highly specialized services even further, that is, in national centres (see section 6.1.1 *Continued specialization and concentration within the hospital sector*).

5.4.1 Day care

Day care involves day surgery (*dagkirurgi*) and day treatment (*dagmedicin*). In 2009, approximately 1.7 million day-care episodes were produced in Sweden (SALAR, 2010a). About one-third of day-care episodes are day surgery. In 2008, approximately 560 000 day cases of surgery were produced in Swedish hospitals, accounting for almost 30% of all surgery episodes (inpatient and outpatient). Some conditions such as cataracts surgeries are almost exclusively performed in the outpatient setting (National Board of Health and Welfare, 2010b). Day treatment includes dialysis of renal failure patients, cytostatic treatment of cancer patients and diabetic care as well as rehabilitative treatment.

5.5 Emergency care

There are about 60 acute care hospitals in Sweden, that is, all 7 regional/university hospitals and about two-thirds of the county council hospitals. Acute care hospitals are open 24 hours a day, every day of the year. There has been a continuous decrease in the number of 24/7 acute care hospitals with full

emergency services during the past 30 years. As with the case of concentration of highly specialized care, acute care needs to be provided to a large enough number of patients in order to maintain a high clinical competence among staff and medical equipment. Moreover, the competence among paramedic staff has changed over the past decade. In 2011, there was at least one nurse with specialist training in pre-hospital care, that is, three years of studying to become a nurse and an additional year of specialist training, in each ambulance in most county councils. Also, the medical equipment in the ambulances has been developed and improved. In most cases, diagnosis and treatment is started by the paramedic staff before the patient arrives at the hospital. This has led to some improved health outcomes, for example, a decrease in mortality of cardiac arrest (SALAR, 2010b).

The number of patients seeking acute care has increased during the past few years, which has led to problems with long waiting times for emergency services. There are, however, no plans to increase the number of hospitals with full emergency services. Rather, the focus is on informing and educating the population about health care seeking behaviour, thereby increasing the use of preventive and primary health care services and avoiding (unnecessary) acute care visits.

In parallel with the development of improved pre-hospital treatment and a concentration of acute care hospitals there has been a development towards the use of so-called mobile teams. Mobile teams are composed of different clinical competences and make acute home care visits, especially to people who have an identified greater need of care, such as older people and people with chronic illness.

5.6 Pharmaceutical care

There are about 1200 pharmacies throughout the country, distributing prescription and non-prescription drugs to the population and to hospitals and other health services. Until 2009, all pharmaceuticals in Sweden were distributed and sold to the general public by the state-owned National Corporation of Swedish Pharmacies (*Apoteket AB*). The Swedish pharmacy market was recently re-regulated, allowing new owners to operate pharmacies from 2009 and allowing the sale of OTC drugs outside pharmacies, for example, in grocery stores. At the same time, about half of the state-owned pharmacies operated by the National Corporation of Swedish Pharmacies were sold. The number of pharmacies increased by about 20% following the reform

(Swedish Competition Authority, 2010a). In 2011, there were 13 pharmacy operators in Sweden, compared to the previous monopoly situation with one state-owned pharmacy.

There are approximately 9000 registered pharmaceuticals and about 1200 active substances in Sweden (National Corporation of Swedish Pharmacies, 2009). The total pharmacy sales of medicines amounted to SEK 35.7 billion (€4 billion) in 2009, of which about two-thirds were prescription drugs. Compared to 2008, there was an increase in sales of prescription drugs by 1% (Research-based Pharmaceutical Industry, 2010). Since October 2002, the TLV has had the responsibility of deciding whether a prescription drug or specific product should be subsidized and included in the reimbursement scheme. The TLV makes its decisions primarily based on the cost–effectiveness of various products. Moreover, together with the introduction of the TLV, generic substitution was introduced, implying that any prescribed drug, which qualifies for a subsidy, has to be replaced by the cheapest comparable generic alternative available at the pharmacy. It is the MPA that decides which drugs are interchangeable. In 2009, the sales of generics corresponded to 14.4% of the total sales value of pharmaceuticals in Sweden. This is equal to almost 45% of the total sales volume in terms of defined daily doses (Research-based Pharmaceutical Industry, 2010).

When hospitals purchase pharmaceuticals for inpatient care, they negotiate any discounts directly with suppliers. Within the county councils' health districts, pharmaceutical committees draw up drug formularies listing which pharmaceuticals are to be used, primarily for outpatient care. About one-fifth of total pharmaceutical sales were inpatient drugs, that is, purchased directly by hospitals and other health services in 2009. Inpatient drugs as a proportion of total pharmaceutical sales have increased steadily during the past decade, from 13% in 2000 to 18% in 2009. The introduction of new cancer drugs has contributed to the increase in the proportion of inpatient drugs measured in costs. The proportion of new original products in relation to the total market is, however, declining steadily. New original products accounted for less than 13% of total pharmaceutical sales in 2009, a decrease of 5.6% compared to 2006 (Research-based Pharmaceutical Industry, 2010).

Prior to 2002, pharmaceutical costs increased by about 10% per annum in Sweden. Between 2002 and 2003 the increase in costs was only 2%, partly because of the introduction of generic substitution and the expiry of patents. The increase in costs has remained at a low level although the introduction of new biological drugs led to a higher level in costs during 2006–2008. The increase in costs fell back to less than 2% again between 2008 and 2009.

Also in 2009, autoimmune agents and anti-neoplastic agents continued to represent the largest group of pharmaceutical sales, followed by anti-asthmatics and analgesics. Anti-neoplastic and immuno-modulating agents represented almost one-fifth of the total sales value. The new biological drugs belong to this group. Three of the five largest pharmaceutical products in terms of pharmaceutical sales are new biological drugs for the treatment of rheumatoid arthritis, psoriasis and inflammatory bowel disease (Enbrel, Humira and Remicade). This constitutes a shift in the Swedish pharmaceutical market, where previously large volume products also represented the largest sales value.

5.7 Rehabilitation/intermediate care

The county councils are responsible for patients until the patient is fully medically treated, that is, until the patient no longer requires hospital care. Then, the physician (together with staff from social care services, other outpatient services and the patient) develops a care plan designed to achieve further rehabilitation. Once a care plan has been developed, responsibility for the patient is transferred to the municipality.

The responsibility for home nursing and rehabilitation lies with the municipalities, which causes coordination problems. Treatment by physiotherapists, for example, is covered by the high-cost protection scheme according to the same principles that apply to other health care services. The division of responsibilities between, on the one hand, medical treatment by the county councils and, on the other hand, nursing and rehabilitation by the municipalities, requires coordination of services for the patient. Care plans are intended to facilitate the coordination of services for the patient and there are ongoing efforts to improve collaboration between municipalities and county councils and develop more integrated services, not least for the older people (see section 6.1.3 *Improved coordinated care for older people*).

5.8 Long-term care

The responsibility for means testing, and the financing and organization of long-term care services for older people and providing support to people with disabilities lies with the municipalities in Sweden. However, the medical responsibility rests with the county councils. The 1992 ÄDEL reform shifted the responsibility for care for older people from the county councils to the municipalities. Municipalities are required to arrange care for dependants

after acute and/or geriatric hospital treatment. The Social Services Act of 1980, revised in 2001, is a framework law emphasizing the right of individuals to receive municipal services. It specifies that older people have the right to receive public services and help at all stages of life. In addition, older and disabled people are normally entitled to subsidized transport to health care facilities. Problems with coordination of care for older people have been on the agenda for many years and several efforts towards solving this issue have been made (see section 6.1.3 *Improved coordinated care for older people*).

The municipalities' expenditures for long-term care for older people amounted to slightly more than SEK 89 billion (€10 billion) in 2006, of which 60% was for special housing (e.g. nursing homes), almost 39% for home-help services in ordinary housing and less than 2% was allocated to other services (*öppna verksamheter*) (National Board of Health and Welfare, 2011a). People with disabilities are entitled to support under the Social Services Act and under special legislation, namely the Act Concerning Support and Service for People with Certain Functional Impairments (1993). This Act includes support in the form of personal assistance, contact people and daily activities.

In 2006, the proportion of older people (65 years and older) receiving home-help services was 8.9% and the proportion living in special housing was 6.2%. The total proportion of older people receiving help either in their home or in special housing has remained fairly stable during the period 2002–2006 but there has been a shift from special housing towards home-help services. The definition of home-help changed in 2006, which makes comparison between the period before and after 2006 difficult. It has however gradually become less likely that a person will receive home-help services over the past two decades due to tougher prioritization of municipal resources and this has led to more help by informal carers.

The proportion receiving help, according to the new definition, was stable during 2007–2009 and amounted to 18.4% in 2009, where home-help services accounted for 5.7% (National Board of Health and Welfare, 2011a). This reflects the main concept guiding care for older people in Sweden today, namely that older people should be enabled to continue living in their own homes for as long as possible. More than 90% of people aged 65 and over reside in their ordinary homes. Home-based care is possible since a great majority of older people in Sweden enjoy good health in older age, and because of modern housing standards and flexibility in services. Although the proportion receiving help has remained stable during the past few years, the number of people aged 65 years and over receiving help has increased. In 2009, some 301 200 older people received help, of whom 205 800 were granted home-help services in

ordinary housing. The total number of hours allocated to home-based services and services in special housing amounted to 4.5 million in 2009 compared to 3.8 million in 2002 (National Board of Health and Welfare, 2011a).

With regard to the challenges facing the provision of social services to older people and people with disabilities, the shortage of skilled personnel in the municipal sector is the most important. The municipalities are experiencing difficulties in recruiting nurses and other staff at the same time as social services are facing both an increasing proportion of older people and older people with more complex needs, for example, patients with multiple diagnoses. This requires integrated care between the county councils and the municipalities for those who need extensive assistance.

5.9 Services for informal carers

As all citizens are entitled to receive appropriate care at all stages of life, there is no legal obligation for people to provide care for their relatives. However, informal carers carry out a substantial proportion of the care for older people. Municipalities can decide to reimburse informal carers under certain circumstances (“relative-care benefits”). During 2003, some 5500 people aged 65 years and over were entitled to relative-care benefits. An additional 2000 people received help from relatives employed by the municipalities, so-called “relative-care employment” (Swedish Association of Local Authorities, 2004).

There is no evidence that the development of an extensive formal care system has brought about a decrease in the amount of informal care. Data from national surveys among older people living at home confirm that informal carers provide an increasing amount of services. This is related to the fact that it has become more difficult to get formal home-help services during the past years due to financial constraints in the municipal sector, but perhaps even more because of the increasing proportion of people aged 65 and above in the population.

5.10 Palliative care

According to the National Board of Health and Welfare, the Swedish definition of palliative care is generally based on the following description by WHO. Palliative care is an approach that improves the quality of life of patients and

their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by early identification and assessment and treatment of pain and other problems, physical, psychosocial and spiritual. Palliative care includes, among other things, relief from pain, and should be carried out in a way that addresses the needs of patients and their relatives (National Board of Health and Welfare 2004b).

The objectives of care for older people and palliative care are formulated in the national plan of action for geriatric policy (Government Bill 1997/98:113). Palliative care is under the management of the county councils and the municipalities. The Health and Medical Services Act and the Social Services Act regulate how the county councils and the municipalities manage these activities. According to the ethical principles applying to Swedish health and medical care, palliative care should be one of the most highly prioritized areas within the health care sector. In practice, both the organization and quality of palliative care vary widely both between and within county councils. Palliative care units are located in hospitals and hospices. An alternative form of palliative care to hospital and hospice care is the provision of advanced home care.

In 2000, the Federation of Swedish County Councils and the Swedish Association of Local Authorities started a project called “Better Care at the End of Life”, with the objective of improving palliative care in Sweden. The participants were teams including representatives from communities, primary care and inpatient care. An evaluation of palliative care, conducted by the National Board of Health and Welfare in 2002, showed that 70% of nurses thought that the quality of palliative care had improved between 1999 and 2001; many of these nurses felt that the project had contributed to this improvement. Regional differences in the access to and quality of palliative care remain an important problem, however.

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 all other health care services. Supplementary legislation regarding compulsory mental care is stipulated in two separate laws: the Compulsory Mental Care Act and the Forensic Mental Care Act. 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. 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.

People with minor mental health problems are usually attended to within the primary care setting, either by a GP or by a psychologist or therapist. Patients with severe mental health problems are referred on to specialized psychiatric care in hospital. About 7% of all specialized psychiatric care is privately provided (SALAR, 2010a).

Specialized psychiatric care includes both inpatient care and outpatient care for people with psychiatric problems due to mental illness and mental impairment. It also includes the treatment of children and adolescents with psychiatric problems as well as the treatment of mental illness related to the abuse of alcohol or other drugs. About 9% of the county councils' total health care expenditures, of SEK 18 billion (€2 billion), were allocated to specialized psychiatric (inpatient and outpatient) hospital care in 2009. About half of the resources were allocated to inpatient care (SALAR, 2010a).

Through the Psychiatric Care Reform, which came into effect in January 1995, the responsibility for psychiatric patients who are regarded as fully medically treated was transferred from the county councils to the municipalities. This reform, among other factors, resulted in a decrease in the number of psychiatric hospital beds since the 1990s – from 14 533 in 1990 to 4606 in 2003. There has, however, been a continuous reduction in hospital beds since the 1970s (see section 4.1.2 *Infrastructure*).

The Swedish Disability Act and the Act Concerning Support and Services for People with Certain Functional Impairments (1993) list a number of specific forms of assistance to which people with mental health problems are entitled, including counselling and support, personal assistance, housing with special services, and access to contact people and to companions. Specialized psychiatric care in Sweden includes psychiatric consultations, psychiatric day care, psychiatric home care and psychiatric inpatient care. Swedish mental health care, like other care, has become more outpatient directed over the past 50 years, with inpatient care decreasing.

5.12 Dental care

County councils have the basic responsibility for ensuring that dental care is available to all citizens. Dental care is provided by the Public Dental Service (the county council dental care organization) and by private care providers. The county councils allocated about SEK 5 billion (€0.55 billion) to dental care services in 2009 (SALAR, 2010a). Dental care services are free of charge to people under 20 years old. About half of the county councils' expenditures on dental health care in 2009 were allocated to services for children and adolescents. Children and adolescents are summoned to a dentist each year, or every second year, for a regular check-up, advice and, if needed, treatment. Parents are advised to register their children with a dentist from the age of 3. Between 5% and 25% of dental care services to children is privately provided. In 2009, about 14% of the county councils' expenditures for dental services were for such privately provided services. The proportion of privately provided dental services paid for by county councils varies from about 33% in Skåne and over 20% in Stockholm, Gävleborg and Östergötland, to about 2% in Halland and Norrbotten.

Dental care services to the population aged 20 and over are provided by a mix of private and public dentists. Between 60% and 80% of dental care services to adults are privately provided. Since the dental care reforms in 1999, 2002 and 2008 (see section 6.1.6 *Changes in subsidies and co-payments for pharmaceuticals and dental services*) there are two types of subsidies for dental services (see section 3.4). A fixed general annual subsidy is paid for preventive dental care and general examinations, with a higher amount paid for people aged 20–29 and over 75 years. The purpose of this fixed subsidy is primarily to maintain the good dental health status in young people that has developed during the past 30 years, by encouraging individuals to utilize basic and preventive services and thereby decrease the need for future treatment. For other dental care services, there is a separate high-cost protection scheme for each 12-month period. The patient pays the full cost up to SEK 3000 (€333), 50% between SEK 3000 and SEK 15 000 (€333–1666) and 15% of the cost above SEK 15 000 (€1666). The TLV decides what dental care services are included in the high-cost protection scheme and decides on reference prices for different treatments.

Most adults have good dental health status and dentists generally summon their registered patients for regular check-ups and possible treatments each year or every second year. According to a survey in 2009, about two-thirds

of the adult population had visited a dentist for a regular check-up during the past two years, whereas about 9% had only visited a dentist for acute treatment (National Board of Health and Welfare, 2011a). According to the same survey, about 70% of the population perceived their own dental status as good. There are however great differences among different socioeconomic groups: only 35% of respondents with a country of birth outside Europe stated that they had a good dental status. People with a country of origin other than Sweden, lower-income groups and single parents generally are less likely to make regular dentist visits and are more likely to have worse dental status (National Board of Health and Welfare, 2009a).

5.13 Complementary and alternative medicine

The Committee for Alternative Medicine is a professional association of societies and schools in the complementary and alternative medicine sector, which has a supervisory role to ensure patients' safety. The Committee was founded in 1984 when the Commission on Alternative Medicine was established by the Swedish state to examine alternative therapies. In 1989, the Commission gave recommendations concerning the position physicians should take towards alternative medicine. The main recommendations were to respect the autonomy of the patient when considering alternative medicine options. The law on working activities within health and medical care specifies patient groups that are not to be treated by people other than trained health care personnel, that is, patients with infectious diseases that have to be notified according to the Communicable Disease Act, patients with malignant tumours, diabetes or epilepsy, and pregnant women. Furthermore, alternative practitioners are not allowed to examine or treat children under eight years old.

There are approximately 200 alternative treatment technologies in Sweden. Some of them are also relatively common in the Swedish health care system, for example, chiropractic, naturopathy and nature-cure medicines. However, these therapies are often regarded as complementary therapies as they are not fully integrated into the official system, for example, chiropractic training does not qualify for student aid by the Swedish National Board of Student Aid. In 1989, Sweden granted recognition to chiropractors and in 1994 official recognition was extended to naturopaths. Thus, both chiropractors and naturopaths are now licensed and work under the Health and Medical Services Act.

Since 1993, natural medicines have been regulated under the Medical Products Act. Different epidemiological surveys have shown that the use of natural medicines is widespread in Sweden and that it is more common among women than men and among people with a higher level of education (National Corporation of Swedish Pharmacies, 2009).

5.14 Health services for specific populations

The Swedish health care system is designed to be a socially responsible, equity-driven system. According to Swedish law, all citizens are entitled to proper treatment in the case of ill health or injury. All social groups are entitled to the same benefits within the health system. Everyone should have the same rights, regardless of their status in the community and those in greatest need should take precedence in medical care, according to the basic principles that apply to health and medical care in Sweden (see section 1.4).

Health, medical and dental care for asylum seekers and other migrants (including undocumented migrants) is regulated by the Health and Medical Care for Asylum Seekers and Others Act (2008) and the Communicable Diseases Act (2004). Asylum-seeking children have the right to receive the same subsidized health and medical services as permanently resident children. Adult asylum seekers have the right to receive care that cannot be deferred, that is, maternity care, care when seeking abortion and advice on contraception. Formally, undocumented migrants also have the right to receive health and medical services. Undocumented children under 18 years have the same right to subsidized health care services as asylum-seeking children and children who are permanent residents. Undocumented adults have the right to receive non-subsidized immediate care. However, since undocumented adults may be refused care if they cannot pay, services for this group are in practice restricted.

6. Principal health care reforms

Reforms in Swedish health care are often introduced by local authorities in the form of county councils, regions and municipalities. This means that the pattern of reform varies across, for example, county councils, although mimicking behaviour usually occurs. During the past 10 years, reforms initiated by individual county councils have focused on developing primary care and coordinated care for older people. In parallel, reforms to restructure the hospital sector that were initiated in the mid 1990s have continued. The governance and management of services have increasingly come to focus on comparisons of quality and efficiency. Reforms initiated at the national level have focused on the responsibilities of county councils and municipalities, more direct benefits for patient groups and regional equality of services. Several national reforms since the late 1990s have aimed at shortening waiting times for services and improving primary care, psychiatric care and the coordination of care for older people. Subsidies for dental treatment have changed several times.

Seven overall themes or areas have guided new initiatives since 2000:

- continued specialization and concentration of services within the hospital sector
- regionalization of health care services including mergers between county councils
- improved coordinated care, particularly for older people
- more choice of provider and privatization to support the development of primary care
- privatization and competition in the pharmacy sector
- changes in subsidies and co-payments for pharmaceuticals and in particular dental services

- increased attention to public comparison of quality and efficiency indicators and the value of investments in health care.

Several recent initiatives and many under discussion are guided by an emerging performance paradigm in the governance and management of health care. Key words related to the current and expected future trend are national quality registers, public comparison of quality and efficiency across local authorities and providers, value for money invested in health care, health outcomes and benefits from the patient perspective, process orientation and coordinated services. As a result of increased transparency regarding the quality and efficiency of services, more attention is directed towards differences across regions and socioeconomic groups, and how they can be resolved. The specialization and concentration of specialist services initiated in the mid 1990s has continued. An important obstacle is the preference for local production across county councils, local hospitals and, not least, specialists themselves. An emerging issue is the long-run financing of health care services. The prognosis shows increased demand because of rapid changes, with more people aged 65 years and above over the next 10 to 15 years. There is no political support for any major changes in the financing of health care.

6.1 Analysis of recent reforms

The introduction of reforms in Swedish health care reflects the decentralized nature of decision-making. Reforms, particularly regarding the organization and management of health care, are often introduced by individual county councils. Similar to developments across other countries, mimicking behaviour can be observed which results in similar trends in reform patterns. During the past 10 years, structural reforms initiated by county councils have focused on developing primary care and coordinated care for older people. In parallel, the restructuring of the hospital sector involving specialization and concentration of services that was initiated in the mid 1990s has continued. The governance and management of services have increasingly come to focus on performance and value. This is exemplified by increased attention to performance measurement and comparison, incentives for quality improvements among providers and choice for patients.

Reforms initiated at the national level often focus on the responsibility of county councils and municipalities, more direct benefits for patient groups and regional equality of services. In the last two decades, several reforms

have aimed at shortening waiting times for services and improved primary care, psychiatric care and coordination of care for older people. Subsidies for pharmaceuticals and dental treatment have changed several times. Other reforms aim to support or prevent developments initiated by local government. Most often, however, national reforms are designed to support rather than prevent current developments in county councils and municipalities.

A general chronological overview of major reforms in Swedish health care during the last decade is presented in Box 6.1. A national perspective is used, which means that several of the reforms refer to changes introduced by the national government. As national reforms often have important links to developments at the local government level, the presentation is also valid for most county councils. It should be noted, however, that large differences exist across the 21 county councils, not least regarding privatization of providers and principles of overall governance.

Box 6.1

Selected major reforms in Swedish health care, 2000–2011

Year	Reform	Purpose
2000	“Stop Law” to prevent privatization of hospitals	Temporary law introduced by national government to prevent privatization of emergency hospitals to profit-making companies across county councils.
2000	National action plan for the development of primary care and care for older people	The national government introduced extra grants between 2001 and 2004 to improve primary care and care for older people.
2002	Dental care reform	A new high-cost protection scheme covering prosthetic treatment for patients from 65 years of age was introduced from July 2002.
2002	Pharmaceutical benefits reform	Set up of a new authority, the Dental and Pharmaceutical Benefits Agency (LFN, later TLV), with responsibility for reimbursement of prescription drugs from October 2002.
2002	Maximum co-payments for municipality health and care services	Monthly maximum co-payments for services offered to older and disabled people by municipalities introduced in July 2002.
2003	Improved collaboration between county councils and municipalities	Payment responsibility introduced in July 2003 for municipalities for patients (including psychiatric patients) who are prepared for discharge from hospital and are in need of municipality care resources.
2003	Merger between university hospitals	Merger between Huddinge and Karolinska hospitals decided by Stockholm county council.

Box 6.1 (continued)

Selected major reforms in Swedish health care, 2000–2011

Year	Reform	Purpose
2005	New waiting-time guarantee (<i>vårdgaranti</i>) introduced	Introduction of new national waiting-time guarantee for elective services from 1 November 2005; the new guarantee has been regulated by a new Health Care Act since 1 July 2010.
2006	Transparent comparison of quality and efficiency across county councils (<i>Öppna jämförelser</i>)	Introduction of regional comparison of indicators reflecting quality and efficiency in collaboration between National Board of Health and Welfare and the SALAR.
2007	National coordination of highly specialized care	Highly specialized care to be coordinated in national centres following decisions by the National Board of Health and Welfare from January 2007.
2007–2010	Choice and privatization in primary care	Introduction of free establishment for accredited private providers and capitation payment following choice of provider by individuals.
2007	Abolition of Stop Law	Abolition of previous limitations regarding possibilities for county councils to contract with profit-making companies to run emergency hospitals.
2008	P4P to shorten waiting times	The government introduced a bonus payment to county councils that meet national waiting-time targets.
2008	Dental care reform	Introduction of a new high-cost protection scheme.
2009	Re-regulation of pharmacy ownership and sale of OTCs	Introduction of competition across privately owned pharmacy chains and sale of select OTC drugs outside pharmacies from July and November 2009, respectively.
2011	New act on patient safety	Introduction of new act to clarify health care providers' responsibility for patient safety through preventive work, 1 January 2011.
2011	Formation of Regional Cancer Centres (RCCs)	Formation of six RCCs following national decision to develop cancer prevention, treatment and care in all stages of cancer disease.

Seven overall themes or areas have guided new initiatives in Swedish health care since 2000. The principal health care reforms related to these themes are presented in detail in sections 6.1.1 to 6.1.7.

6.1.1 Continued specialization and concentration within the hospital sector

The economic recession in the Swedish economy in the early 1990s initiated important changes in the hospital sector. The total number of acute/emergency beds as well as the ALOS were significantly reduced. Responsibility for full emergency services 24/7 was concentrated in larger hospitals. Several smaller hospitals were transformed into community hospitals with limited emergency services and/or specialized centres for elective treatment such as hip and knee surgery (Harrison & Calltorp, 2000).

The trend towards increased specialization and concentration of services has continued in the 2000s, supported by both county councils and the national government. From an organizational perspective, the focus has shifted from reorientation of small hospitals to mergers and collaborations between large university hospitals. In the Gothenburg area, the Sahlgrenska university hospital was formed in 1997 through the merger of three hospitals. In Stockholm, the Karolinska and Huddinge hospitals were merged into the Karolinska university hospital in 2003. Finally, the Malmö university hospital and Lund university hospital were merged into the university hospital of Skåne in 2010. Important objectives in all three cases have been to contain costs through increased collaboration. Additional objectives concern improvements in the quality of services and in conditions for clinical research. In all three cases, the mergers have initiated debate and significant criticism of centralization and regarding the disadvantages of large-scale organizations from senior specialists affected by the changes. More generally, concentration of services is far from always supported by outcome data available in the national quality registers. The problems with implementing the changes associated with the merger of the Karolinska and Huddinge hospitals have been documented in research (Choi, 2011).

The trends toward specialization and the concentration of specialist services have been supported by several national initiatives in more recent years. In 2007, the Committee for National Specialized Medical Care (*Rikssjukvårdsnämnden*) was established with the objective of concentrating highly specialized services in national centres. A further important national initiative was the creation of Regional Cancer Centres (RCCs) in 2011. An impetus for the latter initiative was forecasts of the doubled incidence of cancers by 2030 following demographic changes. Another important motive behind regionalization of services concerns regional differences in waiting times for diagnosis and treatment. Further

objectives are to concentrate curative treatment for cancer patients with more unusual diseases or patients requiring specialized resources, and to improve conditions for clinical cancer research (SOU, 2009:11).

6.1.2 Regionalization of health care services

In parallel with the trend towards mergers across hospitals that emerged in the mid 1990s, initiatives to merge neighbouring county councils developed. In 1999, two regions – Region Skåne and Västra Götalandsregionen – were formed. For a trial period until 2006, initiated by the national government, new elected regional parliaments and management structures for the overall governance of health care services were implemented in these two regions. The two regions were also given responsibility for regional business development, culture and transportation, previously a national government responsibility.

In 2003, the Parliamentary Committee on Public Sector Responsibilities (*Ansvarsutredningen*) was formed. One of its key missions was to investigate whether the local government structure, with 21 county councils (including the two regions formed in 1999), was suitable for future demands concerning health care services. One alternative was to merge additional county councils into regions with at least 1 million inhabitants, who then would become similar to the three largest county councils already in place (Stockholm county council, Region Skåne and Västra Götalandsregionen). Another option, indeed one supported by many physicians (Anell, 2004), was to hand over responsibility for all hospitals or at least university hospitals to the state, similar to the reform introduced in Norway at about the same time. In the final report from the Committee (SOU, 2007:10), it was concluded that developing towards 6–10 larger regions and maintaining decentralization of health care services were the preferred options. Each of these regions should ideally have between 1 million and 2 million inhabitants, and include a research-based university and a university hospital. As had already had been decided for the two trial regions, the new regions should be given additional responsibility for regional business development. The Committee was careful not to propose actual new geographical borders of the larger regions. The argument was that the formation of the new regions should develop from the bottom up rather than by national government decision.

By May 2011, no additional larger regions had been formed apart from the by now permanent regions initiated in 1999. One reason for the slow progress was that the final report from the Committee initiated a debate across local governments about the loss of democracy. Another, more important reason

was that it was far from clear for several county councils which other county councils to team up with. Furthermore, the question of regionalization had not been advocated by the national government. One possible explanation was a reluctance to hand over additional responsibilities to the new and larger regions on the part of the leading party in the centre-right-wing government (*Moderaterna*).

In spite of limited concrete steps towards the establishment of fewer and larger regions to replace present county councils, actual developments in health care services as well as national initiatives indeed support such a development. For example, county councils in northern Sweden have increased their ambitions to collaborate on issues related to the development of health services. In addition, several national initiatives call for increased collaboration. One example is the formation of six RCCs.

6.1.3 Improved coordinated care for older people

Changes within the hospital sector during the 1990s initiated a debate across both national and local health care leaders about the so-called “unfinished structural reform”. The idea was that changes within the hospital sector had not been followed by an adequate development in community services in the form of primary care and care for older people by municipalities (National Board of Health and Welfare, 2002b).

In 2000, the national government introduced a national action plan for the strengthening of primary care, psychiatric care and care for older people. Between 2001 and 2004, an extra SEK 9 billion (€1 billion) was allocated to the county councils with the intention of strengthening these three areas and improving the collaboration between county councils and municipalities. Since then, the national government has initiated several additional changes and government grants to support improved collaboration between county councils and municipalities and the development of more integrated services for older people.

At the local government level, several county councils initiated reform projects in the early 2000s focusing on the development of community services (*närsjukvård*), that is, locally organized and provided services that should respond to the needs for common preventive and curative services for the population (National Board of Health and Welfare, 2003a). Strong community services also enhanced additional changes in the hospital sector in terms of increased specialization and concentration of services. In practice, the idea of community services developed in different directions across county councils.

In some county councils, the reforms focused on a new role for smaller hospitals. In other county councils, the reforms focused more on the need to develop primary care in order to improve the care for older people and for patients with chronic diseases. From a historical perspective, it can be concluded that the “new” ideas of community services were not new at all but rather the same principles that had been suggested for the development of primary care in the early 1970s (Anell, 2004).

6.1.4 More choice of provider and privatization in primary care

Since the 1990s, there has been a trend towards increased choice of provider for the population in both primary and hospital care. This has often but not always been integrated with ideas of privatization of providers. Put simply, centre-left governments have often favoured a model with more choice but without privatization. Centre-right governments have argued that choice and privatization of providers are linked. Thus, the political debate has been more around the pros and cons of the privatization of providers rather than on the choice of provider for the population. Although the debate about the pros and cons of private hospitals has been intense, especially in the late 1990s and early 2000s, only marginal changes have been introduced. In practice, the trend towards more private provision has been much clearer in primary care.

In 2000, the management and operation of St Görans hospital in Stockholm was contracted to a private provider. In the same year, several other hospitals in the county councils of Stockholm and Region Skåne were transferred into publicly owned corporations and the plan was to privatize the operation of additional hospitals. The centre-left national government, however, prevented further local government plans to privatize hospitals in these two county councils governed by centre-right coalitions through the so-called “Stop Law”. In parallel to the new act, a national investigation about the privatization of health care provision was initiated. The main objective of the investigation was to suggest more permanent barriers related to the privatization of hospital services across county councils (Ministry of Health and Social Affairs, 2000). On 1 January 2006, a more permanent regulation was implemented; however, it was abolished in 2007 (Prop. 2006/07:52, Ownership of hospitals) by a new national government led by a centre-right coalition. By then, the focus of privatization in several county councils led by centre-right governments had shifted towards primary care.

In primary care, the option to choose a provider was already implemented in many county councils in the early 1990s. During most of the 1990s, however, formal options to choose were not combined with privatization or changes in payment systems to providers. In 1994, a centre-right national government introduced the Family Doctor Act and the Act on Freedom to Establish Private Practice. However, both these acts were withdrawn in 1995, by the newly elected centre-left government, before they were fully implemented. Even though the acts were withdrawn after a short period of time, several counties had already started to make changes and in some cases continued with reforms as planned.

Following the debate about “the unfinished structural reform” and the need to strengthen primary care in the early 1990s, choice and privatization in primary care returned to the political agenda in the latter half of the 2000s. The county council of Halland was first to introduce reform in 2007, followed by the county councils of Stockholm and Västmanland in 2008. Reforms in these three county councils triggered similar changes in seven additional county councils in 2009 (Anell, 2011). Inspired by the new models, the national centre-right government that came to office in 2006 developed a new act, and choice of primary care provider for the population together with freedom of establishment for accredited private providers became mandatory from 1 January 2010.

The reforms introduced in primary care from 2007 to 2010 are very much the result of election results in 2006 which paved the way for centre-right coalition governments at the national level and across local governments. An important difference compared to the changes in 1994, however, is that the new reforms were initiated by individual county councils. This forced the national government to be more flexible regarding its legislation in 2010 and to allow different models. A clear majority of the county councils have built on the traditional Swedish primary care model with quite large health centres that employ a multidisciplinary work force. Population choice and payment is linked to providers and not individual general physicians. In terms of choice of provider and privatization of providers, however, the reforms did depart from the Swedish traditions of health centres with a geographical population responsibility.

By August 2010, 223 new primary care centres had been established following the reforms in primary care, equal to a 23% increase (Swedish Competition Authority, 2010b). Two-thirds of the new units have been established in the three major county councils/regions of Stockholm, Region Skåne and Västra Götalandsregionen. Also within these three county councils/regions, most of the new units have been established in more populated areas.

About one-third of the total number of private providers is owned by three large national health care corporations, two of them owned by venture capitalists and the third owned by practitioners themselves as a cooperative. An additional 13% of providers are owned by local or regional corporations with five or more units. The information available indicates that access to primary care services has improved due to the increase in number of providers but also due to an increase in office hours triggered by increased competition between units (Swedish Competition Authority, 2010b).

An evaluation of the reform in Stockholm indicates an increase in productivity of 10% during the first year, explained by an increase in physician visits (Rehnberg et al., 2010). In the second year this increase levelled off to 3%. Although there is large variation across different providers, there are no significant differences in productivity between private and public providers. The use of primary care services measured by weighted patient visits has increased in all age groups and more so in demanding patient groups (e.g. multiple chronic illnesses) and in low-income areas. This indicates that the reforms in Stockholm have improved the distribution of services in favour of low-income areas and more demanding patient groups. Existing studies have been criticized, however, as they are based on the number of visits to different staff categories and fail to analyse potential changes in the content of visits.

The impact of reforms in other county councils in terms of productivity and distribution of services has not yet been fully evaluated. Since the model preferred in other county councils outside Stockholm favours more reliance on capitation payment and a broader service responsibility for primary care providers, the experience may well be different from developments in Stockholm (Anell, 2011). During autumn 2011, criticism against in particular large private health care corporations owned by venture capitalists have grown, following a reported case of severe quality problems in a Stockholm-based nursing home owned by one of the corporations. More generally, there is also a debate about profit levels in health care services exceeding those in other service sectors, and that large health care corporations owned by venture capitalists avoid corporate taxes through elaborate, although legal, tax planning. The outcome of this current debate in terms of future regulation of private providers is uncertain.

6.1.5 Privatization and competition in the pharmacy sector

The pharmacy sector was re-regulated in 2009. A first step was the privatization of about 50% of the pharmacies previously owned by the National Corporation of Swedish Pharmacies. A second step was to allow the sale of selected OTC products, like nasal sprays and painkillers, outside pharmacies in grocery stores, gas stations and other licensed facilities. The primary overall stated purpose of the reform was to increase access to pharmacies and medicines through additional pharmacies and more generous opening hours. For OTC drugs and other medicines, the purpose was also to induce price competition across licensed providers.

In total, 465 pharmacies organized in 8 clusters were transferred to private ownership through a tendering process in 2009. An additional 150 pharmacies were organized in a special group where individual owners could bid for ownership of a single pharmacy. Four new private pharmacy chains entered the market, owned by a mix of venture capitalists but also pharmaceutical wholesale corporations. Following the start of the re-regulated market in July 2009, additional pharmacy chains have entered the Swedish market, whereas others have decided to leave. The National Corporation of Swedish Pharmacies still owns and operates about 30% of all pharmacies and is one of the main actors in the new market.

In total, the number of pharmacies has increased by about 20% since the reform and information suggests that access for the population has increased (Swedish Competition Authority, 2010a). An emerging debate, however, is whether access to individual medicines has deteriorated. Nevertheless, the pharmacies still have a responsibility to provide all prescribed drugs within 24 hours.

6.1.6 Changes in subsidies and co-payments for pharmaceuticals and dental services

Co-payments and high-cost protection schemes for visits to primary and specialist care have been quite stable during the last two decades. For medicines, important changes were introduced in 1997 (see section 3.4) but the basic principles have been stable since. As part of the reform to support generic substitution of drugs in 2002, a requirement that patients had to pay the full difference in price between the preferred drug and the lowest priced generic was introduced. The economic incentives for consumers to accept the lowest priced generic was further strengthened in 2009, as patients had to pay the full

cost for a generic alternative not representing the lowest priced generic or not prescribed by the physician. As before, individual physicians can overrule these policies by reference to medical reasons.

Studies show that people with a low income refrain from actually purchasing their prescribed medicines at the pharmacy to a higher extent (National Board of Health and Welfare, 2009a). Single mothers, for instance, are three times more likely not to collect their prescribed medicines compared to the population in general. Efforts aimed at solving these problems include a system where patients can pick up prescriptions and pay later in partial payments. There is no real debate or support for cancelling the system or excluding certain medicines or patient groups from co-payments. More often it is suggested that the present high-cost ceiling for any 12-month period gives patients with a “free-card” perverse incentives as they don’t pay anything for additional prescriptions. In January 2012, the high-cost ceilings for health care services and prescription drugs were also increased from SEK 900 to SEK 1100 (€100 to €122) and from SEK 1800 to SEK 2200 (€200 to €244) respectively.

In 2002, maximum co-payments for municipality care for older people and the disabled were introduced by the national government. The background for this intervention was the large differences in co-payments that had developed across the 290 municipalities since the early 1990s when decisions on co-payments were decentralized. In some municipalities the co-payment had left some older people with only a small proportion of their pension and income for other needs. This started a fierce debate about fairness in the late 1990s that preceded the government initiative to regulate maximum fees. In 2011, the maximum fee was set at SEK 1712 (€190) per month.

Several changes in subsidies for dental services for adults over 20 years have been introduced since the late 1990s. A reform in 1999 introduced new policies, with limited fixed subsidies for implants and other high-cost prosthetic services, and more support for basic services and prevention. In addition, funding responsibility for dental services for older people at nursing homes and as part of other medical treatments was transferred to the county councils from the municipalities. For these patient groups, the general fixed co-payments for outpatient services apply for necessary dental services.

The idea behind the new policies was to maintain the good dental health status that had developed among the younger generations by introducing incentives for patients to invest in basic and preventive services to decrease the need for future repairs. Further objectives were to introduce price competition between dentists as subsidies were determined by fixed reference prices. The

reform quickly led to very high costs for some people with extensive need for prosthetic services, not least among older people. Studies in the late 1990s also showed that dental care was more unequally distributed across socioeconomic groups than the use of health care or prescription medicines. There was no indication that the new policies induced a higher interest in preventive and basic dental services (National Swedish Social Insurance Board, 2000:3).

In 2002, the policies were changed and a new high-cost protection scheme was introduced. In 2008, the policies were changed again and decisions regarding subsidies for different services were moved to the TLV. Since then, subsidies have been similar to those used for prescription drugs (see section 3.4). A voluntary insurance or pre-payment scheme covering basic dental services have been offered by public dental services since 2004.

More recent studies show that dental services are still distributed depending on income. According to a survey in 2009, 22% of the population say they have given up dental care in spite of dental need, which is a higher percentage compared to 2005. About half of the responding population state that the reason was financial (National Board of Health and Welfare, 2010a).

6.1.7 An emerging performance paradigm in the governance of health care

A number of initiatives at both the national and local government levels suggest that governance of health care services is guided by an emerging performance paradigm. Traditional objectives of distributive justice and cost control are still valid but have been complemented by objectives concerning efficiency and value for the money spent on health care services.

At the national level, value-based pricing and reimbursement of prescription drugs were implemented in 2002 when a new authority, the TLV was set up (see sections 2.7.1 *Information systems* and 2.8.4 *Regulation and governance of pharmaceuticals*). Assessments of decision-making by the TLV during the first years of operation indicated that transparency in the decision-making process and use of cost-effectiveness criteria were important norms (Jansson, 2007; Anell & Persson, 2005). In the early years, the TLV was only responsible for the assessment of prescription drugs. By 2008, however, their responsibility included subsidies for dental care and, in 2011, the TLV was entrusted to assess all drugs irrespective of whether they are prescribed or used in inpatient care only. The TLV is also responsible for monitoring activities in the newly established pharmacy market. This expansion of responsibility suggests that

the working method and approach of the TLV, including transparency and the focus on value for money, have been well received by government and other stakeholders.

The two norms of transparency and value for money have also had an impact on other initiatives in the 2000s. Increasingly, both the National Board of Health and Welfare and the SBU started to include studies and information about cost-effectiveness in their evidence-based recommendations, guidelines and systematic reviews. In the early 2000s, new ideals of transparent priority setting emerged across county councils, inspired by normative theories of accountability for reasonableness (Daniels & Sabin, 1997). Evaluations by the National Centre for Priority Setting in Health Care (*Prioriteringscentrum*), a centre set up jointly by the Ministry of Health and Social Affairs and the SALAR in 2001, suggest that only a few county councils have actually tried to implement transparent priority setting in practice (*Prioriteringscentrum*, 2008). Nevertheless, several activities and initiatives at the national level have been guided by the new ideas of increased transparency.

Reforms and initiatives to improve access to health care have been high on the political agenda since the early 1990s. A new national waiting-time guarantee for elective services was introduced in November 2005, stipulating the following targets:

- 0 days – primary care will offer patients contact over the phone or in health care centres the same day
- 7 days – a doctor visit if needed will be provided within seven days
- 90 days – visit to specialist care will be offered within 90 days of a referral from primary care
- 90 days – treatment will be offered within 90 days of the specialist deciding on the appropriate treatment.

If the county council is unable to provide elective services within the stipulated targets, patients should be offered care from an alternative provider at no extra cost. Expected waiting times for elective services across different providers are available at a dedicated web page (www.vantetider.se). From September 2008, the new guarantee was complemented with a P4P programme providing extra government grants to those county councils that complied with targets. The background for this initiative was persistent problems with excessive waiting times, in spite of the new guarantee. In 2008, the new programme had improved waiting times and in May 2010, the number of

patients who had to wait longer than 90 days for elective treatments had been reduced by 50%. Since 1 July 2010, the 2005 waiting-time guarantee has been regulated in the Health Care Act.

In 2006, the National Board of Health and Welfare together with the SALAR initiated a project called *Öppna jämförelser* (transparent regional comparison) whereby the 21 county councils are annually compared based on a number of indicators that reflect quality and efficiency. The number of indicators has increased over the years. Reports for later years include comparison across hospitals for some of the indicators as well as results compared for patients with different socioeconomic status. There are special reports focusing, for example, on care for older people by the 290 municipalities and quality and efficiency in cancer care.

Indicators in the first three reports were organized into four areas: medical results including health outcomes, patient experiences, availability of care, and costs. The report for 2008 is available in English (National Board of Health and Welfare & SALAR, 2008). From 2009, medical results have been further organized by major diseases and new categories, such as prevention, have been added. In the report for 2011, 173 indicators were used for comparison of county councils in comparison with 134 indicators in 2010. Data to support the comparisons come from the national quality registers, population and patient surveys and from individual county councils.

For most indicators, the county councils are ranked based on performance and categorized into three groups: green (best performance), yellow (average) and red (below average performance). Comparisons are made with reference to other county councils only. In the report for 2010, it was concluded that improvements have been made for a majority of the indicators that have been monitored since 2006. Still, large remaining differences across county councils indicate that more could be done to improve performance. Anecdotal evidence suggests that the reports have more significant effects on those county councils that are categorized as well below the average.

The indicators reported in *Öppna jämförelser* have also been used in academic research. Janlöv (2010) compared all 21 county councils based on information from the reports together with data on the volume and cost of services. One conclusion was that the quantity and quality of care were complements in the production process. County councils that ranked high based on traditional cost-based productivity measures also tended to rank high on measures based on health outcomes.

At the individual county council level, quality and efficiency indicators are more frequently used when managing health care services. The balanced scorecard became a popular method in Swedish health care management around the mid 2000s, and was practised at both central levels and by clinical departments (Funck, 2009). In more recent years, several county councils have developed their payment systems with components of P4P. P4P is used especially within primary care but to some extent also for hospital services and when the national government allocates grants to local government (Anell, 2010). P4P programmes in primary care constitute 2–4% of total payments to providers and usually focus on fewer than 20 process indicators. Examples include: compliance with recommendations by the local drug committee, preventive services, waiting times and patient experiences. However, indicators focusing on health outcomes or clinical results are scarce.

At the national level, P4P has been linked to compliance by county councils to the national waiting-time guarantee since 2009. This programme has contributed to a reduction in reported waiting times for patients by county councils, but has been criticized on the grounds that it gives incentives to favour patients with minor needs at the expense of patients with more severe disease. Additional areas where the national government has discussed the use of P4P is in government grants to support patient safety and improved cancer care (SOU, 2009:11).

There are a limited number of studies regarding the effects of P4P in Sweden. A study of developments in primary care in one county council indicated that effects were uncertain (Jacobsson, 2008). A major problem is the lack of valid indicators and weak knowledge of what constitutes baseline performance. Another evaluation of P4P to support care for patients with heart failure indicated improvements in process indicators (Olsson et al., 2010).

The focus on transparent comparisons of quality and efficiency and developments of P4P programmes has triggered an increased interest in national quality registers in health care. In a report published in 2010, commissioned jointly by the national government and SALAR, an annual investment of SEK 300 million (€33 million) between 2011 and 2015 to improve use of national quality registers was suggested (SALAR, 2010c). The existing national quality registers were described as a unique and an underused “gold-mine” covering 25% of total health care expenditures and 41% of total costs in inpatient care. Additional government grants to support existing quality registers and develop new registers for primary care have also been implemented. One important

problem is the fact that IT support and solutions vary across registers, since existing registers have developed from the bottom up, without any original national support or common framework.

The lack of a national framework for IT applications and solutions in health care has also been discussed more generally. By law, health care employees have access to data from other caregivers in the same county council following consent from individual patients. In practice, IT solutions to support the sharing of information between health care providers are not always in place. The Ministry of Health and Social Affairs, SALAR and several national authorities in the health care area have consequently forged a national IT strategy. The effort will involve a number of steps, including the amendment of laws and regulations, upgrade of technology infrastructure, improved user-friendliness, access to necessary data and increased accessibility for the general public (SALAR, 2009).

6.2 Future developments

Future developments within the Swedish health care sector can be expected to include the implementation of reforms already initiated. Overall, several initiatives initiated recently and under discussion are guided by the emerging performance paradigm in the governance and management of health care. Key words related to the current trend are national quality registers, transparent comparison, value for money, health outcomes from the patient perspective, process orientation and coordinated services. More attention is being focused on the need to establish valid performance indicators and increase abilities to monitor performance on a regular basis by investments in registers and new IT solutions. As a result of increased transparency, more attention is also directed towards differences in results and outcomes across regions and providers and the learning opportunities that such differences provide. In March 2011, a new investigation was commissioned by the national government to prepare for a new act regulating patients' rights.

Since 2006, the privatization of providers in outpatient services has been on the agenda at both the national level and across local centre-right governments. The introduction of choice and privatization in primary care is still a new reform in several county councils and the outcome for patients and health care services has not yet been fully evaluated. Conditions for governance and the need for regulation have indeed changed for both the national and local governments. Already when the reforms were implemented, comments

were made that cancellation of the previous geographical responsibility would have a detrimental effect on collaboration between primary care and care for older people by municipalities. Developments during the autumn of 2011 have also seen growing criticism of, in particular, the behaviour of large health care corporations owned by venture capitalists. Still, a re-elected centre-right national government in 2010 means continued support for development of more private providers.

Also for other patient groups, including cancer patients, the too frequent lack of coordinated services and regional differences in, for example, waiting times are perceived as a major problem. The national initiative to form RCCs specifically referred to such problems. New forms of disease-management programmes, focusing on the development of the process of care from a patient perspective, are being developed and tried in several county councils. Experience of the successes and shortcomings of new programmes are so far limited. Nevertheless, this development has an influence on other initiatives. Future development of the national quality registers will most likely include more data capturing patient-reported health outcomes.

In parallel to attempts to integrate and coordinate care, the specialization and concentration of specialist services continue. The initiative to form RCCs will most likely contribute to increased concentration of curative cancer care at both the national and regional levels. Arguments for such developments include increased cost-effectiveness in services and quality in terms of survival as well as improved opportunities for clinical research. An important obstacle for such a development, however, is the preference for local production across several county councils, local hospitals and, not least, specialists at local hospitals. In addition, concentration of services is not always supported by outcome data available in the quality registers.

An emerging question is the long-run financing of health care services. The prognosis shows increased demand because of rapid changes in demography, with more older people in the next 10–15 years. The same prognosis also means a funding problem since the workforce is not likely to increase (Lindgren & Lyttkens, 2010). However, the expected gap between the increase in demand and worsened conditions for continued economic growth and funding through a proportional income tax has not resulted in any new investigations of alternative options by the national government. There is no political support for any major changes in the financing of health care.

7. Assessment of the health system

Average life expectancy at birth in Sweden is among the highest in the world and has improved by 5.5 years over the last 30 years. Also, in terms of amenable mortality, Sweden usually ranks among the best OECD countries. Swedish health care also performs well compared to other countries with respect to disease-oriented indicators of health service outcomes and quality of care. The Achilles' heel of Swedish health care has been the long waiting times for diagnosis and treatment in several areas. A number of initiatives at both national and local level have been implemented to reduce waiting times and improve access to providers. Improving access to diagnosis and treatment continues to be a key policy objective among both national and local politicians in order to improve the responsiveness to patients' needs and maintain the legitimacy of the publicly financed health system.

In the past, regional equity and equity across socioeconomic groups in terms of quality of care was more or less taken for granted. As public comparison of indicators reflecting quality and efficiency across county councils and providers has revealed significant differences, this ideal has been challenged. The regional comparisons of health care quality and efficiency (*Öppna jämförelser*), conducted annually since 2006, have been instrumental in this development. Increased attention has also been paid to the rather low level of investment in primary care and the possible detrimental effect on equity of access to services as a result of this bias. The frequency of user charges for health care services and medicines still commands little attention. The exception is for dental services, where subsidies for high-cost prosthetics for adults have increased following reports of inequity between socioeconomic groups.

Although Swedish health care ranks high in cross-country comparisons of population health, health care outcome measures and quality of care, the opposite is usually the case when it comes to technical efficiency. For

specialized services, indications of poor technical efficiency are somewhat surprising since Sweden at the same time reports a low bed-rate per inhabitant and reasonably low ALOS. More generally, however, studies suggest that there is no significant correlation between technical efficiency (measured by output and costs) and indicators reflecting quality of care across the 21 county councils. For example, Stockholm county council ranks high in terms of both volume of output (first place) and technical efficiency (second place), but is below average in terms of weighted results using 130 indicators reflecting access, patient safety and medical results from the regional comparison. The best combination of weighted quality indicators and low costs per inhabitant can be noted in the county council of Östergötland. Other county councils that are able to combine favourable results regarding access, patient safety and medical results with below average costs per inhabitant are Kalmar, Halland and Jönköping.

7.1 Stated objectives of the health system

According to the Swedish Health and Medical Services Act of 1982, “Health and medical services are aimed at assuring the entire population of good health and of care on equal terms. Care shall be provided with respect for the equal dignity of all human beings and for the dignity of the individual. Priority for health and medical care shall be given to the person whose need of care is greatest” (author’s translation). The Health and Medical Services Act specifies that the responsibility for ensuring that everyone living in Sweden has access to good health care lies with the county councils/regions and municipalities. At the same time, the Act is designed to give county councils and municipalities considerable freedom with regard to the organization of their health services.

Swedish health care performs well compared to other countries with respect to general health as well as clinical indicators in major disease areas. This favourable position compared to other OECD countries has been documented in a number of reports (WHO, 2000; Nolte & McKee, 2003, 2008; SALAR, 2008). The Achilles’ heel of Swedish health care has been the long waiting times for diagnosis and treatment in several areas. Since the early 1990s, a number of initiatives at both national and local level have been implemented to reduce waiting times and improve access to providers, including reformed payment systems, privatization, introduction of targets and waiting-time guarantees and extra government grants. These attempts to reduce waiting times have generally

not been linked to the individual needs of patients. Physicians in particular have argued that an important problem with general waiting-time targets is that patients with greater needs may have to wait even longer if waiting-time targets are to be fulfilled (Winblad & Andersson, 2010). Reducing general waiting times and improving access to diagnosis and treatment continue to be key policy objectives for both national and local politicians in order to improve the responsiveness to patients' needs and maintain the legitimacy of the publicly financed health system.

In the last decade, a performance paradigm has evolved and the attention of leadership and governance has shifted to cover additional areas. Since the late 1990s, the definition of “good care” and “priority to those in greatest need”, and the need for transparency in priority setting have been discussed. This development is primarily driven by an increased demand for priority setting and criteria that can be used in practice for this purpose. National authorities now use the same set of criteria, including information about cost–effectiveness, when determining priorities, for example, when making decisions to reimburse prescription drugs or when developing national guidance to support priority setting at local level in major disease areas (see section 2.7.2 *Health technology assessment*). At the local level, priority setting is still less transparent (Prioriteringscentrum, 2008).

In the past, regional equity and equity across socioeconomic groups was more or less taken for granted. Providers were assumed to provide services of equal quality, guided by evidence and experience, and data to question this assumption were not available. Increasingly, as the collection, compilation and dissemination of performance data have improved and comparison across county councils and providers made possible, this ideal has been challenged. Although Swedish health care still performs well compared to other OECD countries on a national level, there are significant differences and thereby room for improvement across the 21 county councils and 290 municipalities. The regional comparisons of health care quality and efficiency (*Öppna jämförelser*, see section 2.7.1 *Information systems*), conducted annually since 2006, have been very important in this respect. These comparisons have supported a change in the attention of leadership and governance across county councils to focus on results and quality of care.

7.2 Financial protection and equity in financing

7.2.1 Financial protection

Although user charges are in place for all types of health services, they pose a limited financial burden for most groups of patients because of the high-cost protection scheme for both outpatient services and prescription drugs (see section 3.4.1 *Cost-sharing (user charges)*). An indication to support this conclusion is the fact that there is no market for private insurance to cover user charges. Such a market is common in several other countries (OECD, 2004). For any individual, irrespective of use of outpatient services and prescription drugs, the maximum payment during a 12-month period is SEK 3300 (€366) in total (a maximum of SEK 1100 and SEK 2200 for outpatient care and prescription drugs, respectively). For inpatient services there is no high-cost protection but user charges are only symbolic, about SEK 80 (€9) per day.

Although the high-cost ceilings for outpatient services and prescription drugs give adequate financial protection for most patient groups, surveys indicate that this may not be the case for vulnerable groups such as single mothers (see section 1.4). For a single-parent household, all children are covered by the same high-cost protection scheme for prescription drugs, that is, SEK 2200 (€244) maximum for all children within the same household during a 12-month period. In most county councils there are no user charges for minors under 20 years old. Still, the combined user charges may be a significant financial burden for a low-income household.

A more general problem affecting more individuals is the lack of financial protection for dental care for patients over 20 years old. Studies suggest that user charges for dental care are most problematic for older people in need of high-cost prosthetic treatments (see section 6.1.6 *Changes in subsidies and co-payments for pharmaceuticals and dental services*). In the last decade, additional and more comprehensive subsidies have been implemented indicating that both centre-left and centre-right governments perceive the lack of equity in access to dental care as an important problem.

7.2.2 Equity in financing

The basic funding mechanism in Swedish health care is proportional income taxes at the local government level. With respect to user charges this makes health care financing at the local government level slightly regressive, since low-income households on average pay a larger share of their income for health

services. Financing of health care is supplemented by central government grants, however, and as central government expenditures are partly financed by progressive income taxes this regressive effect of user charges is partly balanced out. A previous study using data from 1980 and 1990 concluded that Swedish health care financing is weakly progressive, in spite of the regressive effect of direct payments (Gerdtham & Sundberg, 1998).

7.3 User experience and equity of access to health care

7.3.1 User experience

Swedish health care is consistently ranked rather low in comparison to other OECD countries in areas of responsiveness of health care services. According to the *World health report 2000* (WHO, 2000), the goal attainment of Swedish health care was higher for contribution to health compared to level of responsiveness. A similar result has been echoed in later comparisons. In the 2009 ranking by Euro Health Consumer Index covering 33 countries, Swedish health care receives maximum points in the outcome area, and also ranks highest (together with Luxembourg) in the area covering range and reach of services. Sweden also performs reasonably well in the area of patient rights and information. There is confidentiality of personal information and patients have access to their own medical records. Patient involvement in treatment decisions and the right to a second opinion in case of serious disease is regulated by the Health Care Act. In the area covering waiting time for treatment, however, Swedish health care ranks among the poorest, together with Finland, Portugal, Spain and the United Kingdom.

The Swedish national waiting-time guarantee is quite modest in international comparisons, but is still not reached in full by any of the 21 county councils for all patients and diagnoses. Thus, by objective measures, Swedish health care has a general access problem. The divergence between actual waiting times and what is stipulated in the guarantee is also frequently reported by the media. These reports most likely have an impact on individuals' expectations and attitudes towards health services. In turn, subjective measures of user experiences are probably influenced by the expectations. If individuals expect waiting times to be long, actual user experiences may in fact be rather positive, provided that waiting times in practice were shorter than expected. This potential bias of reported user experience needs to be taken into account when assessing performance.

Attitudes toward health care services have been collected annually since 2001 through a national population survey (*Vårdbarometern*). Comparisons of results across county councils and over time are presented at the Health Care Barometer web site. Since sample sizes are small and only cover 1000 individuals in each county council, data from the population survey only allow for comparison at an aggregate level. Results from the 2010 survey showed that 65% of responders had a high confidence in health care services within their county council. Differences across county councils were significant, however. On average, 82% of responders (75–88% depending on county council) thought that they had access to health care according to their need. Among those who did not think they had adequate access to services, shorter waiting times were considered important to improve the situation. Only 40% agreed fully or in part that waiting times for a visit to hospital were reasonable, compared to 63% for primary care. Both confidence and attitudes towards whether waiting times are reasonable have improved slightly since 2005.

Since 2009, patient experiences have been collected separately through a standardized National Patient Survey (*Nationella Patientenkäten*) every second year. Previously, the *Vårdbarometern* also registered patient experiences among those individuals in the population who had been in contact with health services. The National Patient Survey provides new opportunities for more detailed comparison of experiences at the provider level. Results from existing surveys are presented at www.indikator.org/publik. So far, patient surveys have been conducted for primary care, emergency departments and specialized care. Patients are generally very satisfied with how they are received by physicians and nurses in primary care but demanded improvements in areas such as questions about previous health status, information about waiting times, side-effects of medicines and what signals to look out for concerning their health condition. Specifically, patients in specialized care called for improved attention to previous diseases and the health status of the patient as well as more information about the expected progress of disease. For emergency departments, patients demanded information about expected time to see a physician. Among the responders, 68% had waited less than 4 hours in the emergency department, but 17% had waited 4–6 hours and as many as 15% had waited for 6 hours or more.

A number of reforms and interventions targeted at strengthening responsiveness to patients' needs in general and improving waiting times in particular have been implemented (see chapter 6). An important emerging issue concerns patient safety, particularly in the hospital setting. Developments of RCCs include plans to strengthen collaboration with patient organizations and

facilitate input from patients when improving services. Although a positive trend can be noted in terms of both objective and subjective measures of overall confidence and waiting times, changes are not significant and linkages to the reforms introduced are uncertain.

7.3.2 Equity of access to health care

Access to health care services naturally differs across geographical areas depending on the density of the population and the distance to health care services. In major city areas, such as Stockholm, Gothenburg and Malmö, the supply of specialized services is denser compared to rural areas. Private physicians and physiotherapists funded by the county councils exist in larger numbers per inhabitant in major cities. Since primary care has no formal gate-keeping function in a majority of the county councils, access to specialized services is easier in urban areas. Shortages of physicians and problems of recruitment are also more serious in sparsely populated county councils and rural areas.

The development of health care services during the 1970s and 1980s improved equity of access to health care across high- and low-income groups (Anell, Rosén & Svarvar, 1996). Problems of inequity across groups depending on socioeconomic conditions persist, however. A comparison of horizontal equity across 21 OECD countries with data from 2000 indicated a pro-rich distribution of total physician visits in about half of the countries, including Sweden (van Doorslaer et al., 2006). Moreover, the study indicated that Sweden, together with the United States, Mexico, Finland and Portugal, had the greatest measured inequity. One possible explanation may be the rather poor development of primary care in Sweden (see section 6.1.4 *More choice of provider and privatization in primary care*). For specialized care, access to physician visits was pro-rich distributed in all of the 21 countries. In several countries, this was balanced out by a pro-poor distribution of access to general physicians in primary care. Unfortunately, the data for Sweden that was used in the comparison by van Doorslaer et al. did not distinguish between visits to primary and specialized care, respectively. However, the pro-rich distribution of total physician visits in 2000 matches the fact that the development of Swedish health care had been dominated by specialized services.

The general outcome for Sweden in the international comparison by van Doorslaer is supported by Swedish studies. The National Board of Health and Welfare reported a greater number of health care visits among individuals with higher education in 2001, in spite of the fact that health needs were more

severe across individuals with lower education (National Board of Health and Welfare, 2001). In fact, a follow-up study in 2006 indicated that inequity across groups based on educational background had worsened (National Board of Health and Welfare, 2007). The same study also suggested that such differences in access to care may explain why mortality and inpatient care for patients with diabetes, a condition treatable in primary care, were more common in rural areas. A difference in access to health care across ethnic groups, which is linked to differences in socioeconomic conditions, is a growing concern. Studies have shown wide variation in access to health services for asylum seekers across the 21 county councils (National Board of Health and Welfare, 2008a).

Available studies suggest that access to primary care services have improved in more recent years following the introduction of choice and privatization in primary care (see section 6.1.4 *More choice of provider and privatization in primary care*). An evaluation of the reform in Stockholm concluded that weighted patient visits had increased more in low-income compared to high-income areas. This indicates that the distribution of services as a result of reform had developed to the benefit of lower socioeconomic groups. The impact of similar reform in other county councils has not been evaluated as yet. Developments may well be different from those in Stockholm since payment systems and the financial responsibility for primary care providers differ across county councils.

7.4 Health outcomes, health service outcomes and quality of care

7.4.1 Population health

Average life expectancy at birth in Sweden is among the highest in the world and has improved by 5.5 years over the last 30 years. However, gains in life expectancy between 1995 and 2007 were quite modest in comparison to most other OECD countries (Joumard, André & Nicq, 2010). In comparison with other countries, life expectancy among Swedish men also stands out more favourably than among Swedish women. Comparison of patterns across different age groups also shows that the favourable life expectancy rate at birth can be attributed to low mortality rates in ages up to 60 for women and 75 for men. Above these ages, mortality rates are actually relatively high in Sweden (National Board of Health and Welfare & SALAR, 2010). For women, this

can in part be attributed to the fact that smoking became popular in Sweden earlier than in many other European countries. Lung cancer has also increased considerably among women since the late 1980s. Among men, lung cancer decreased during the same period. A further indication of women's previous smoking habits is deaths due to chronic obstructive pulmonary disease, which were 84% higher in 2009 than in 1987 among women.

In 2011, women in Sweden have about the same smoking habits as women in other European countries. However, the reduction in smoking has been more prominent among Swedish men. Still, men have higher mortality rates in lifestyle-related diseases, such as diseases of the circulatory system but also deaths due to traumas and accidents, alcohol and suicide. Women have higher mortality rates in cancer than men in ages up to 60 years of age, explained partly by the rate of breast cancer. Deaths due to mental illness and diseases of the nervous system have increased during the past 20 years in both men and women. The proportion of people stating that they suffer from worry, fear or anxiety has increased within all age groups and the increase is most prominent in urban areas and among single mothers. Moreover, treatment for depression has increased among young women (see section 1.4).

In previous international comparisons of mortality amenable to medical intervention by Nolte and McKee (2003, 2008, 2011), using data from 1997/1998, 2002/2003 and 2006/2007, Sweden consistently ranked among the best. This result is replicated in a study by Joumard, André and Nicq (2010) using data from 2006 and two definitions of amenable mortality. There is no universal definition of amenable mortality, however, and results for Sweden are worse if ischaemic heart disease is included in the definition of amenable mortality. About one-fifth of total mortality in Sweden is related to ischaemic heart disease, with a significantly higher risk among men and a substantial variation across the 21 county councils (National Board of Health and Welfare & SALAR, 2010). Still, there has been a 33% reduction in mortality due to ischaemic heart disease in Sweden between 1997 and 2008, a development that has brought health benefits to men especially.

An additional major source of mortality is cancer. In comparison with other countries, cancer care in Sweden performs well in terms of five-year survival rates. Data from Eurocare-4 indicates that mean age-adjusted five-year relative survival was significantly higher in the Nordic countries (excluding Denmark) and central European countries for colorectal, lung, breast, prostate and ovarian cancer compared to southern Europe, the United Kingdom and Ireland and eastern Europe (Berrino et al., 2007). A later comparison of survival rates

following colorectal, lung, breast or ovarian cancer during 1995–2007 in Australia, Canada, Denmark, Norway, Sweden and the United Kingdom showed that survival was persistently higher in Australia, Canada and Sweden (Coleman et al., 2010).

When comparing five-year survival rates for 10 cancer diseases across the 21 county councils, differences exist although they are not significant in many cases and no county council stands out as the best in all areas (National Board of Health and Welfare & SALAR, 2011). In the area of breast cancer, differences in five-year survival rates across county councils are particularly small, which has been attributed to the implementation of screening programmes. Overall, the relative five-year survival rates for men with cancer have increased from about 50% in 1990–1994 to almost 70% in 2005–2009. For women, an increase from 60% to 80% can be noted over the same period.

Problems and challenges within cancer care are frequently debated. New and expensive medicines have been introduced and access to these medicines varies between the regions. Another theme in the debate is waiting times for diagnosis and treatment that creates worry among patients and their relatives, and an overall lack of responsiveness to patient demands. In more recent years, the expected increase in overall prevalence and incidence of disease, due to both increased survival and demographic changes, is an additional theme in the debate. An important national initiative in view of these challenges was the creation of RCCs in 2011 (see section 6.1.1 *Continued specialization and concentration within the hospital sector*).

7.4.2 Health service outcomes and quality of care

The vaccination coverage rate for measles, mumps and rubella for children born in 2007 was 96.5% in January 2010 (National Board of Health and Welfare & SALAR, 2010). This level of coverage is considered high by international standards. Similar coverage rates apply for vaccination against diphtheria, tetanus, pertussis, Hib and polio (see section 1.5). Coverage rates for influenza vaccination among those aged 65+ vary across county councils – between 50% and 70% (57% on average) – and this can in part be attributed to differences in policy. While vaccination is generally encouraged, based on recommendations from the National Board of Health and Welfare, policies regarding user charges vary (Anell & Glenngård, 2007).

The importance of prevention in terms of supporting lifestyle changes across the population, related to smoking, alcohol use, dietary habits and physical activity, has increased over the last decade. At both the national and

regional levels, efforts have been made to support an increased awareness across health care staff as to the importance of identifying patients belonging to certain risk groups and facilitating lifestyle changes. The National Board of Health and Welfare estimates that about one-third of all cardiovascular diseases can be prevented through lifestyle changes. As much as 70% of health care expenditure is related to smoking, abuse of alcohol, obesity and lack of physical activity according to a report by the National Board of Health and Welfare (2009b). Experience shows that it is difficult to achieve significant and sustainable changes in these areas, however. Although some progress has been made (see section 1.5), promotion of a healthy lifestyle across socioeconomic groups, particularly those with low income and education, continues to be an important challenge.

Data on avoidable hospital admission rates may reflect the quality of outpatient services and are available for all county councils since 2004. There is currently no international standard that dictates which diagnoses and acute events to include in the measure, which makes comparison across countries uncertain. In the Swedish definition of avoidable admission rates, chronic diseases such as anaemia, asthma, diabetes, heart failure, hypertension, chronic obstructive pulmonary disease and vascular spasm are included. In addition, a number of acute events such as ulcer, epileptic attacks and selected inflammatory episodes and infections are covered. In 2009, 1051 hospital admissions per 100 000 inhabitants and almost 1 million total bed days were avoidable by this definition (National Board of Health and Welfare & SALAR 2010). This means that close to 15% of all acute beds (i.e. 2700 beds in total) were occupied by avoidable hospital admissions. A slight improvement can be noted in 2009 compared to 2004. A range of between 934 and 1302 avoidable hospital admissions per 100 000 inhabitants across the 21 county councils suggests that there is potential for additional improvements.

Health service outcomes and quality of care related to cardiovascular disease were specifically assessed by the National Board of Health and Welfare in 2009. The 11 indicators used in this assessment were also reported in the 2010 regional comparison (National Board of Health and Welfare & SALAR, 2010). Data for patients with acute myocardial infarction (AMI) admitted to intensive care are collected through a medical quality register called RIKS-HIA. Although almost all acute care hospitals participate, coverage rates vary and far from all patients are included in the register. This makes comparison across county councils, and also providers, somewhat uncertain. Total mortality within 28 days following AMI decreased by 10% between 1990 and 2000 and continued to decrease in the following decade. Still, the average mortality rate within 28 days following

AMI during 2006–2008 was 30%, and mortality rates across county councils in the same period varied between 19.6% and 32.4% for women and 24.6% and 34.5% for men (National Board of Health and Welfare & SALAR, 2010). Several factors may explain differences across county councils, including differences in registration of patients, socioeconomic conditions and co-morbidity, as well as distance to acute care hospitals and the quality of acute care. Mortality within 28 days of hospital admission following AMI is somewhat easier to specifically relate to the quality of acute care and more commonly used in international comparisons. By this standard, the same positive development in terms of a consistent decrease in mortality across county councils since 1990 can be noted. Mortality for patients admitted during 2007–2009 was on average 13.5% for women and 14.1% for men. Mortality following admission for AMI in Sweden was also found to be very low in WHO's MONICA project covering 25 countries (National Board of Health and Welfare & SALAR, 2010). Still, there is significant variation in mortality rates across hospitals, indicating a potential for further improvement.

Mortality related to stroke is common and the number of admissions and bed days in hospitals, nursing homes and rehabilitation centres following stroke is significant. Total mortality within 28 days following stroke decreased from 26% in 1994 to 22% in 2008. Improvements are much less significant in comparison with AMI. As with AMI, variation across county councils exists but these may in part be explained by factors outside the control of the health services. Mortality within 28 days following hospital admission for stroke decreased from about 19% in 1994 to 14% in 2009. Significant variation exists across hospitals in terms of 28-day mortality, but also in terms of additional stroke within 365 days and activities of daily living level three months after stroke. These differences may in part be related to variation in the quality of care. Comparison of quality indicators across hospitals and county councils shows that quality of care varies in important respects, for example, number of people who receive care at special stroke units and adequate drug treatment following stroke (National Board of Health and Welfare & SALAR, 2010).

The interest in patient-reported outcome measures has increased and several national quality registers include such data. Several indicators in the regional comparison by the SALAR and the National Board of Health and Welfare also reflect patient-reported outcomes, such as health benefits following hip replacement, treatment of rheumatoid arthritis and gynaecological surgery, and assessment of functional ability by patients who had a stroke. Much more can be

done in this area, however. A growing concern is the need for coordination and standardization of the measurements used in different national quality registers, to facilitate comparison over time and across providers or even medical areas.

Guidelines issued by the National Board of Health and Welfare regarding preferable treatments and actions within major disease areas have become more important to support appropriateness of care over time. County councils that rank low on certain indicators in the regional comparisons usually turn to such guidelines, if available, to improve performance. Additional knowledge sources that are used to support improvements are the reports issued by the SBU. In both guidelines by the National Board of Health and Welfare and in reports by the SBU gaps between evidence-based medicine and actual practice in county councils are discussed. Depending on the disease area, there is evidence of both under- and overprovision of care.

Overprovision is frequently discussed with regard to the use of antibiotics and polypharmacy and drug interactions among people over 80 years. Quality indicators related to drug use among older people have recently been added to the regional comparisons and there is no information about any trend over time. Significant variation across county councils exists. The use of antibiotics is fairly low in Sweden as well as in the other Nordic countries compared to the rest of Europe. The regional comparisons also indicate a reduction between 2006 and 2009. Still, Sweden is far off the optimal level defined by the strategic group for rational use of antibiotics (known as STRAMA). As any evidence of overprovision can be directly linked to excessive health care expenditures, county councils are usually keen to implement policies and incentives for providers to change their practices. For example, prescribers in primary care are encouraged through P4P programmes to adapt their use of antibiotics to guidelines (Anell, 2011).

On the other hand, underprovision is frequently discussed with regards to general access to psychiatric services and cognitive therapy, and access to physicians for older people in nursing homes. In parallel to discussion about polypharmacy among older people and excessive use of antibiotics, there is evidence of underprovision of drug treatment within several major disease areas, for example, hypertension, secondary prevention following heart disease, stroke and hip fracture among women, diabetes, depression and atrial fibrillation. In several areas, there is evidence of both under- and overprovision. Within the area of hypertension, for example, there is evidence of both an

excessive use of expensive drugs and a general underprovision of treatment options to individuals with uncontrolled high blood pressure (Swedish Council on Technology Assessment in Health Care, 2007).

In a comparison across 19 OECD countries using data from 2007 to 2009, Sweden ranks among the best for the following patient safety indicators: foreign body left in during surgical procedure, catheter-related blood-stream infection, post-operative pulmonary embolism or deep vein thrombosis and accidental puncture or laceration (OECD, 2009). For post-operative sepsis in 2007, Sweden scores better than average for the 19 countries, but is not among the best. For obstetric trauma for vaginal delivery with or without instruments, Sweden together with the United States reports the highest (worst) rates.

Concern for patient safety in Swedish health care has increased during the last decade. The prevention and reduction of risk as well as the improvement of treatment and care for patients are considered important parts of quality management. Patient safety indicators are therefore an important part of the regional comparisons. As in other areas, reports show that county councils vary in terms of reported cases. For infections induced by health care treatment in specialized inpatient care in 2010, the rates vary between 7% and 12% across counties (National Board of Health and Welfare & SALAR, 2010). Each such case can be expected to increase length of stay by four days on average. Although infection rates are low compared to most other countries, the variation across counties indicates room for improvement.

7.4.3 Equity of outcomes

Previous studies indicate that men between 40 and 49 years of age belonging to the 10% highest income group can be expected to live three years longer than men in the same age group belonging to the 10% lowest income group (Gerdtham & Johannesson, 2000). Similar results apply for women and if educational background is used as the socioeconomic indicator instead of income. Moreover, data indicate that survival rates from breast cancer are lower in women with low education and several other differences in health status and outcomes across socioeconomic groups do exist (see section 1.5). Differences in health outcomes may be explained by several factors, for example differences in co-morbidity and distance to health services, and may not be directly attributed to differences in the provision and quality of care across socioeconomic groups at the point of service. Still, amenable mortality is three times higher among individuals with low education compared to individuals with higher education (National Board of Health and Welfare, 2009a). Differences in health outcomes are indeed a

challenge for health care services. Differences need first of all to be addressed when implementing preventive programmes to support lifestyle changes and when designing outpatient services that can reach socioeconomically deprived groups and detect and prevent diseases at an early stage.

7.5 Health system efficiency

7.5.1 Allocative efficiency

The main fund-holders and purchasers in Swedish health care are the 21 county councils. To ensure that county councils have similar opportunities to invest in health care, a national system with extra grants based on differences in demography, average income and density of population is in place (see section 3.3). The national government may also implement extra government grants to support development within a certain area. In the last decade, this has been done more frequently than before. Several agreements with the SALAR have been made to support the development of primary care, care for older people, psychiatric care, reduction of waiting times, improved coordination of care, patient safety and cancer care. In principle, however, the 21 county councils are expected to set priorities between different health care areas horizontally and also provide directions for the vertical priorities set by the medical profession within each area.

In practice, priorities are heavily influenced by past investments in health care, which have favoured specialized services and hospital-based care. Policies have also been introduced at the national level to support the development of primary care, care for older people and psychiatric care. Risk-adjusted resource-allocation formulas that have been developed within several county councils usually show that the resources allocated to the population within each county reflects past investments in health care facilities, rather than population needs. As changes are difficult to implement, resource allocation within each county council is usually heavily influenced by historical costs. Risk-adjusted formulas to allocate resources to different providers are used more consistently within primary care. Actual formulas vary across counties from simple formulas based on three or four age groups to more complex formulas based on adjusted clinical groups and socioeconomic need (Anell, 2011).

Investment in primary care has picked up since the 1990s following changes within the hospital sector and the general transfer of care to outpatient settings. Investments in primary care have also been supported by extra government

grants and by a new act in 2010 introducing privatization and choice of provider for consumers (see section 6.1). Analysis using data from the regional comparisons also indicates that such investments pay off. Investments in primary care have been found to correlate with higher total productivity of health care services (Janlöv, 2010). Mechanisms to support evidence-based and cost-effective vertical priorities have been introduced only in the last two decades. Although both the guidelines from the National Board of Health and Welfare and the systematic reviews by the Swedish Council on Technology Assessment in Health Care are based on evidence-based principles and include data on cost-effectiveness, the impact of this national support at the local level is uncertain (see section 6.1.7 *An emerging performance paradigm in the governance of health care*).

7.5.2 Technical efficiency

Although Swedish health care usually ranks high in cross-country comparisons of health care outcome measures, the opposite is generally the case when it comes to comparisons of health care output and technical efficiency. A previous comparison of primary care in 32 countries showed that Swedish GPs had few patient visits per day (Groenewegen, Boerma & Sawyer, 2003). For specialized services, a cross-sectional comparison of public hospitals in Norway, Finland, Sweden and Denmark using data from 2002 indicates significantly higher average technical efficiency in Finland compared to Norway and Sweden (Linna et al., 2010). The result from this and similar previous studies of technical efficiency in hospital services is somewhat surprising since at the same time Sweden reported a low bed-rate per inhabitant and low ALOS compared to most other countries (see section 4.1.2 *Infrastructure*).

Studies focusing on development over time point towards reduced technical efficiency in Swedish health care before 1990, which was followed by increased efficiency in the early 1990s. The increase in productivity in the early 1990s was particularly strong among those county councils that introduced case-based payment (Gerdtham et al., 1999). In the period after 1996, expenditures again increased more significantly than output. More detailed comparison of expenditure development and use of health care staff in different areas support the view that efficiency decreased in the latter half of the 1990s (Jönsson et al., 2004). From 2003, efficiency increased in somatic specialized services. An evaluation of recent reforms, introducing privatization and choice, also indicate improved technical efficiency in primary care among both private and public providers (Rehnberg et al., 2010).

It should be noted that different results from studies focusing on development over time are highly influenced by the fact that the availability of output data has varied. Before 2002, adequate data to describe outpatient services was lacking, and the reported decrease in efficiency in the latter half of the 1990s may reflect the general transfer of activity from inpatient to outpatient care. From 2002, more adequate data are available to describe outpatient services in hospitals and, from 2005, improvements have also been made to describe output in psychiatric care. For primary care, data used in studies about technical efficiency still reflect a categorization of visits to different staff.

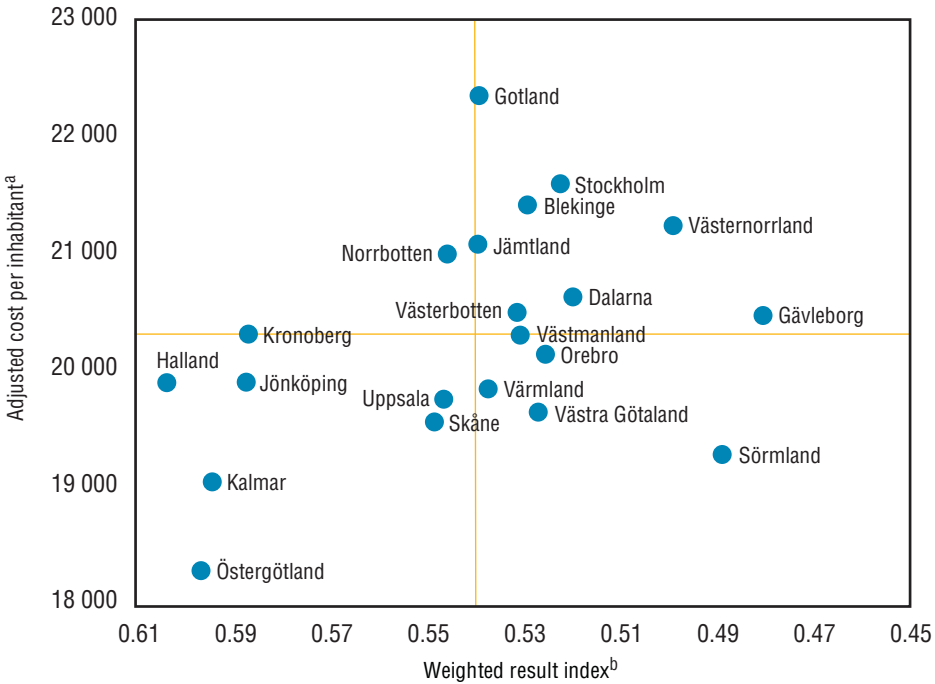
Besides improved data on output, the regional comparison has made it possible to include data about quality and results in Data Envelopment Analysis of technical efficiency. The output from such an analysis can then be used in regression analysis to study the correlation between efficiency and a number of factors. Studies have found a significant and positive correlation between patient satisfaction scores and technical efficiency in terms of low costs per patient-contact (Janlöv, 2010; Rehnberg et al., 2010). This supports the view that there is no negative trade-off between efficiency and patient satisfaction. Furthermore, studies of efficiency across primary care providers in Stockholm failed to find any correlation with ownership (Rehnberg et al., 2010). The new competitive conditions have improved efficiency among both private and public providers. More generally, there is no correlation between technical efficiency (measured by output and costs) and indicators reflecting quality of care across the 21 county councils. This same lack of correlation between output measures and indicators reflecting quality has also been present in cross-country comparisons (OECD, 2010). For example, Stockholm county council ranks high in terms of both volume of output (first place) and technical efficiency (second place), but is below average in terms of weighted results using 130 indicators reflecting access, patient safety and medical results from the regional comparison (SALAR, 2011). The best combination of weighted results and low costs per inhabitant can be noted in Östergötlands läns landsting (see Fig. 7.1). Other county councils that are able to combine favourable results with below average costs per inhabitant are Kalmar, Halland and Jönköping.

Technical efficiency within pharmaceutical care has improved since the late 1990s, when county councils were given financial responsibility for drug budgets, mandatory generic substitution and the use of cost-effectiveness criteria in making decisions about reimbursement and inclusion in local

formularies and national guidelines (see section 2.7.2 *Health technology assessment* and section 5.6). Still, variation in prescribing, which is evident in the regional comparisons, indicates room for improvements.

Fig. 7.1

Adjusted cost per inhabitants (SEK) and weighted result index, 2009



Source: SALAR, 2011: 53.

Notes: ^a Adjusted for differences in sex, age, socioeconomic conditions, number of patients with severe illnesses, rural areas and consumption of medicines. ^b Based on 130 indicators reflecting access, patient safety and medical results from the regional comparison.

7.6 Transparency and accountability

In Sweden, the principle of public access to official records has helped to make decision-making at both the national and local government levels more transparent. Formal access to protocols and political and administrative decisions does not necessarily mean that transparency exists in practice, however. Less than 10 years ago, important information about differences in quality across county councils and providers was only available for those members of the medical profession who had access to data from national quality registers. The regional comparisons introduced in 2006 were an important step

towards improved transparency of differences in results and quality. Increased transparency has also been an important development trend across the national quality registers (see section 2.7.1 *Information systems*).

The public release of information and the regional comparisons have also increased transparency around the fact that different providers, both within and between county councils, set different priorities. Key areas debated in the media are different use of new medicines in cancer care and different use of new and expensive biological treatment options for patients with rheumatoid arthritis, psoriasis and inflammatory bowel disease. Both patient organizations and the pharmaceutical industry have been instrumental in drawing the attention of the media to existing differences. General public awareness about the increased transparency in terms of quality is rather low, however. In part this can be explained by the fact that comparison is mainly focused on differences across county councils and municipalities and not on providers, such as hospitals and primary care units. The information in the regional comparisons is more interesting for politicians and managers within county councils. Increasingly, however, comparisons are also made across providers. In the latest issues of regional comparisons from the SALAR and the National Board of Health and Welfare, comparisons are made across hospitals for selected indicators. There are also similar private initiatives such as www.omvard.se with the aim of providing citizens and patients with comparative information about providers on which to base their choices of provider. There are additional private initiatives such as *doktorsguiden.se* (www.doktorsguiden.se) that instead use information directly from patients to rank individual doctors as well as hospitals and primary care units. There are no studies addressing what extent comparative information about providers is actually used by consumers, however. Studies also indicate a general illiteracy in the general population regarding benefits to which they are entitled. There is for example limited awareness of the existing waiting-time guarantees (Winblad & Andersson, 2010).

Sweden has a long tradition of local self-government and the main responsibility for the delivery of health care services rests with the 21 county councils and 290 municipalities. The main argument on the part of local government politicians to prevent too much influence from the national level and reduce trends towards centralization since the early 1990s has been the loss of democracy. Conditions for local government, however, are determined by the national government and any changes in the national legislation and Health Care Act are determined by the national parliament. Both local and national governments are therefore accountable for health care performance, above all through the general elections held every fourth year (see section 1.3).

It can be argued that developments towards increased transparency and the regional comparison of results and quality indicators have made both local and national governments more accountable for health care performance. The same type of comparison is also used internally by hospital and primary care management to hold individual providers accountable. Within primary care, recently introduced reforms with freedom of establishment for private providers have meant that systematic follow-up of performance and medical auditing of selected providers have been more common. Increased transparency in combination with improved possibilities for consumer choice has also contributed to increased accountability between patients and primary care providers in terms of responsiveness.

8. Conclusions

The present Swedish health care system reflects a long history of public funding and ownership together with a strong tradition of local self-government. Developments until the late 1960s were characterized by a growth in the hospital sector, largely determined by an expanding medical profession. During the 1960s, county councils were entrusted with additional responsibility for mental health services and general outpatient services, previously a national government responsibility. By 1982, a new Health and Medical Services Act formally handed over responsibility for planning and provision of services to the county councils.

During the last two decades, and with the exception of expenditures for prescription drugs, the national level has not endowed the county councils with any additional major responsibilities. During the early 1990s, the trend was rather to transfer responsibility from county councils to the 290 municipalities. In 1992, the responsibility for long-term inpatient health care and care for older people was transferred from the county councils to the municipalities. A few years later, the municipalities took over the responsibility of care for physically disabled people and for those suffering from long-term mental illness. The objective of these reforms was to improve services by integration between care and social services of the municipalities. In the last decade, a trend towards increased intervention from the national government can be noted. This is exemplified by new legislation regarding waiting times and patient safety and national financial incentives to promote the development of primary care, psychiatric care, care for older people and improved access to elective services. Further examples include the government decisions to implement RCCs and concentrate highly specialized services in national centres.

During the 1960s and the 1970s, the chief concern at both the national and the local government levels was to improve equal access and quality through the expansion of services. Since the late 1980s, a much more critical attitude

towards health care, and county councils and municipalities as providers of services, has developed. In addition to distributive justice, objectives related to cost control, efficiency, value and quality have become more valid in the governance of health care services at both the national and the local level. In the late 1990s, the lack of choice for inhabitants was debated and, not least, county councils were criticized for a lack of cost control and poor technical efficiency. This criticism paved the way for a number of structural reforms in the early 1990s, including the purchaser–provider split, new contracts for providers and increased choice of provider for inhabitants. Many county councils returned to a traditional mode of planning and control in the mid 1990s, following an economic recession in the Swedish economy. Significant changes were at the time introduced in the hospital sector. The number of beds and the associated nursing staff decreased as well as the ALOS. Emergency care was concentrated as several small hospitals had to focus on elective treatment and/or more limited acute services. As a consequence of changes in the hospital sector, the need for improved primary care services and services for older people provided by municipalities became even clearer. During the last decade, reforms involving choice and privatization to support development of primary care have been implemented and there has been a focus on care outside the hospital setting. In contrast to developments in several other countries, structural reforms and other changes in the delivery of services are often initiated and implemented by individual county councils rather than through national legislation. This can be seen as a reflection of the decentralized nature of Swedish health care.

Several recent and currently discussed initiatives are guided by an emerging performance paradigm in the governance and management of health care. Key words related to the current and expected future trend are national quality registers, public comparison of quality and efficiency across local authorities and providers, value for money invested in health care, health outcomes and benefits from the patient perspective, process orientation and coordinated delivery of services. The regional comparisons of health care quality and efficiency (*Öppna jämförelser*), conducted annually since 2006, have been instrumental in this development. As a result of increased transparency in the quality and efficiency of services, more attention is directed towards differences across regions and socioeconomic groups and how they can be resolved. In the past, most decision-makers were satisfied with the fact that Sweden had good public health and very satisfying results in terms of health outcomes and clinical quality in comparison with most other countries. The Achilles' heel of Swedish health care has above all been the long waiting times for diagnosis and treatment in several areas. Swedish health care also usually ranks more poorly

in comparison of technical efficiency across providers. This position, however, may say more about the potential problems of measuring technical efficiency without due consideration of the quality of care, rather than anything about the performance of Swedish health care.

With increased transparency and efforts to monitor and compare the quality and efficiency of county councils and providers, it has become evident that there is room for improvement in health care services. Although the average performance in terms of health outcomes and clinical quality may still be among the best in the world, it has become clear that all county councils and hospitals do not perform equally well. There is however no simple explanation behind the variation in quality and efficiency since no county council or provider performs well in all respects. The county councils that perform best in terms of quality of care, access, patient safety and costs seem to have accomplished this end in different ways. More transparency also means that even more attention is being paid to the need for valid performance indicators and improved possibilities for monitoring performance on a regular basis through investments in registers and new IT solutions. In these areas, arguments have also been made that there is a need for much closer collaboration between the 21 county councils. The main arguments from local government to prevent too much influence from the national level has been the loss of local democracy and the fact that conditions for delivery of health services vary depending on geographical conditions. The national government, however, is entitled to express its will in all areas of health care and local governments serve under laws determined by the national parliament. Both local and national governments are therefore accountable for health care performance, above all through the general elections held every fourth year. It can be argued that increased transparency through the public regional comparison of quality and efficiency has made both local and national governments more accountable than before. Improved possibilities for patients to choose their provider have also contributed to an increased accountability between patients and providers in terms of responsiveness.

Future developments within the Swedish health care sector can be expected to include the implementation of already initiated reforms. Although the attention is more on cost control, cost-effectiveness and quality of care in the overall governance of health care, it is not evident that this has had any major impact on development of services so far. The introduction of choice and privatization in primary care is still a new reform in several county councils and the outcome for patients is uncertain. There is evidence of improved access and technical productivity in several county councils but more limited information about the distribution of services across patient groups. Developments during

autumn 2011 have seen growing criticism of, in particular, the behaviour of large health care corporations owned by venture capitalists. A re-elected centre-right national government in 2010 does however imply continued support for more private providers.

For many patient groups, the lack of coordinated services is perceived as a major problem. New forms of disease-management programmes, focusing on the development of the process of care from a patient perspective, are being developed and tried in several county councils. Experience of the successes and shortcomings of new programmes are limited so far. In parallel with attempts to integrate and coordinate care, increasing specialization and concentration of specialist services continues. The initiative to form RCCs will most likely contribute to increased concentration of curative cancer care at both the national and regional levels. Arguments for such developments include increased cost-effectiveness in services and quality in terms of survival as well as improved opportunities for clinical research. An emerging question is the long-run financing of health care services. The prognosis shows increased demand because of rapid changes in demography with an increase in the proportion of older people in the next 10–15 years. The same prognosis also means a funding problem since the workforce is not likely to increase. There is, however, no political support for any major changes in the financing of health care.

9. Appendices

9.1 References

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9.2 List of laws

Abortion Law [Abortlag] SFS [Svensk Författningssamling] 1974:595, with changes in SFS 1995:660.

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 Freedom to Establish Private Practice [Lag om etableringsfrihet för hussläkare] 1994:1960 (included in Act 1993:588).

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 Health Data Registers SFS [Svensk Författningssamling] 1998:543.

Communicable Disease Act [Smittskyddslagen] SFS [Svensk Författningssamling] 1988:1472.

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.

Forensic Mental Care Act [Lagen om rättspsykiatrisk vård] SFS [Svensk Författningssamling] 1991:1129.

Government Bill (Regeringens Proposition) 1994/95:25. Vissa ekonomisk-politiska åtgärder m.m. [Certain economic policy measures, etc.]

Government Bill (Regeringens Proposition) 1994/95:150. Förslag till slutlig reglering av stadsbudgeten för budgetåret 1995/96 m.m. [Suggestions for final regulations of the budget for the fiscal year 1995/96].

Government Bill (Regeringens Proposition) 1995/96:207. En ekonomisk politik för att halvera den öppna arbetslösheten till år 2000 [An economic policy for halving open unemployment by 2000].

Government Bill (Regeringens Proposition) 1996/97:60. Prioriteringar inom hälso- och sjukvården [Priority setting within health and medical care].

Government Bill (Regeringens Proposition) 1997/98:113. Nationell handlingsplan för äldrepolitiken [National action plan for care of the elderly].

Government Bill (Regeringens Proposition) 2002/03:35. Mål för folkhälsan [Targets for public health].

Health and Medical Services Act [Hälso- och sjukvårdslagen] SFS [Svensk Författningssamling] 1982:763.

Law of Supervision [Lag om tillsyn över hälso- och sjukvården] SFS [Svensk Författningssamling] 1996:786.

Medical Products Act [Läkemedelslag] SFS [Svensk Författningssamling] 1992:859.

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

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.

Prop. (2006/07:52) Driftsformer för sjukhus [Ownership of hospitals].

Public Procurement Act [Lag om offentlig upphandling, LOU] SFS [Svensk Författningssamling] 1992:1528.

Clinical Directors in Health Care [Verksamhetschefer inom hälso- och sjukvård] SOSFS [Grundförfattning, Socialstyrelsens allmänna råd] 1997:8.

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

“Stop Law” [Lag om inskränkning i landstingens rätt att överlämna driften av akutsjukhus till annan, “Stopp-lag”] SFS [Svensk Författningssamling] 2000:1440.

9.3 Useful web sites

The Association of Private Care Providers [Vårdföretagarna]:

<http://www.vardforetagarna.se>

Church of Sweden [Svenska kyrkan]:

<http://www.svenskakyrkan.se>

County Councils' Mutual Insurance Company [Landstingens Ömsesidiga Försäkringsbolag]:

<http://www.lof-forsakring.com>

Dental and Pharmaceutical Benefits Agency [Tandvårds och Läkemedelsförmånsnämnden, TLV]:

<http://www.tlv.se>

Forum Health Policy [Forum for health policy]:

<http://www.healthpolicy.se>

Government Offices of Sweden [Regeringskansliet]:

<http://www.regeringen.se>

Health Care Barometer [Vårdbarometern]:

<http://www.vardbarometern.nu>

Leading Health Care:

<http://leadinghealthcare.se>

National Centre for Priority Setting in Health Care [Prioriteringscentrum]:
<http://www.imh.liu.se/halso-och-sjukvardsanalys/prioriteringscentrum>

Medical Products Agency [MPA]:
<http://www.lakemedelsverket.se>

Medical Responsibility Board [Hälso- och sjukvårdens ansvarsnämnd, HSAN]:
<http://www.kammarkollegiet.se/hsan>

National Board of Health and Welfare [Socialstyrelsen]:
<http://www.soc.se>

National Social Insurance Board [Riksförsäkringsverket]:
<http://www.rfv.se>

Statistics Sweden [Statistiska Centralbyrån]:
<http://www.scb.se>

Swedish Agency for Health and Care Services Analysis
[Myndigheten för vårdanalys, MYVA]:
<http://myva.se>

Swedish Association of Health Professionals [Vårdförbundet]:
<http://www.vardforbundet.se>

Swedish Association of Local Authorities and Regions, SALAR
[Sveriges Kommuner och Landsting, SKL]:
<http://www.skl.se>

Swedish Association of the Pharmaceutical Industry
[Läkemedelsindustriföreningen]:
<http://www.lif.se>

Swedish Council on Technology Assessment in Health Care
[Statens Beredning för Medicinsk Utvärdering]:
<http://www.sbu.se>

Swedish Institute for Health Economics
[Institutet för Hälso- och sjukvårdsekonomi]:
<http://www.ihe.se>

Swedish Institute for Infectious Disease Control
[Smittskyddsinsitutet, SMI]:
<http://www.smittskyddsinstitutet.se>

Swedish Medical Association [Sveriges Läkarförbund]:

<http://www.slf.se>

Swedish Municipal Workers' Union [Kommunal]:

<http://www.kommunal.se>

Swedish National Institute of Public Health [Folkhälsoinstitutet]:

<http://www.fhi.se>

Swedish Society of Medicine [Svenska Läkarsällskapet]:

<http://www.sls.se>

Waiting times [Väntetider]:

<http://www.vantetider.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 most recent template is available online at: <http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits/hit-template-2010>.

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. With its summer 2007 edition, the Health for All database started to take account of the enlarged EU of 27 Member States.

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, complaints procedures, public participation 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 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, dental care, complementary and alternative medicine, and health services for specific populations.
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 based on the stated objectives of the health system, financial protection and equity in financing; user experience and equity of access to health care; health outcomes, health service outcomes and quality of care; health system efficiency; 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, useful web sites and legislation.

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 (see the following section).
- 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 each other 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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^g Russian

^h Spanish

ⁱ Turkish

^j Estonian

^k Polish

^l Tajik



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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.