

Health Systems in Transition

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Contents

Preface	v
Acknowledgements	vii
List of abbreviations	ix
List of tables and figures	xi
Executive summary	xiii
1. Introduction	1
1.1 Overview of the health system	1
1.2 Geography and sociodemography	3
1.3 Economic context	5
1.4 Political context	8
1.5 Health status	9
2. Organizational structure	15
2.1 Historical background	15
2.2 Organizational overview	18
2.3 Decentralization and centralization	24
2.4 Population coverage	26
2.5 Entitlements, benefits and patient empowerment	28
3. Planning and regulation	31
3.1 Regulation	31
3.2 Planning and health-information management	35
4. Financing of health care	41
4.1 Revenue mobilization	41
4.2 Allocation to purchasers	47
4.3 Purchasing and purchaser–provider relationships	49
4.4 Payment mechanisms	51
4.5 Health care expenditure	53

5. Physical and human resources	59
5.1 Physical resources.....	59
5.2 Human resources	66
6. Provision of services.....	73
6.1 Public health	73
6.2 Patient pathways.....	75
6.3 Primary/ambulatory care	78
6.4 Secondary/inpatient care.....	80
6.5 Pharmaceutical care.....	82
6.6 Rehabilitation/intermediate care.....	83
6.7 Long-term care	84
6.8 Services for informal carers.....	86
6.9 Palliative care	86
6.10 Mental health care	87
6.11 Dental health care	89
6.12 Alternative/complementary medicine.....	89
6.13 Maternal and child health	90
6.14 Health care for specific populations	93
7. Principal health care reforms	95
7.1 Analysis of recent reforms.....	96
7.2 Future developments.....	104
8. Assessment of the health system.....	107
8.1 The stated objectives of the health system	107
8.2 The distribution of the health system's costs and benefits across the population	107
8.3 Efficiency of resource allocation in health care.....	110
8.4 Technical efficiency in the production of health care.....	111
8.5 Accountability of payers and providers.....	112
8.6 The contribution of the health system to health improvement	113
9. Conclusions.....	115
10. Appendices.....	119
10.1 References	119
10.2 Useful web sites.....	126
10.3 List of laws	127

Preface

The Health Systems in Transition profiles are country-based reports 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 profile is produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a profile.

Health Systems in Transition profiles 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; and
- 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.

Compiling the profiles 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 WHO Regional Office for Europe health for all database, national

statistical offices, Eurostat, the Organisation for Economic Co-operation and Development (OECD) health data, the International Monetary Fund (IMF), the World Bank, and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

A standardized profile has certain disadvantages because the financing and delivery of health care differs across countries. However, it also offers advantages, because it raises similar issues and questions. The Health Systems in Transition profiles 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 Health Systems in Transition series are most welcome and can be sent to: info@obs.euro.who.int.

Health Systems in Transition profiles and Health Systems in Transition summaries are available on the Observatory's web site at www.euro.who.int/observatory. A glossary of terms used in the profiles can be found at the following web page: www.euro.who.int/observatory/Glossary/Toppage.

The data used in this report are based on information available by January 2006, with one exception – the Public Health Report, 2005.

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The current series of Health Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Systems and Policies. The European Observatory on Health Systems and Policies is a partnership between the World Health Organization (WHO) Regional Office for Europe, the governments of Belgium, Finland, Greece, Norway, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, CRP-Santé Luxembourg, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the Health Systems in Transition profiles is led by Josep Figueras, Head of the Secretariat, and research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is led by Susanne Grosse-Tebbe.

Giovanna Ceroni managed the production and copy-editing, with the support of Shirley and Johannes Frederiksen (layout) and Helen Ure (copy-editor). Administrative support in the preparation of the Health Systems in Transition profile for Sweden was undertaken by Caroline White.

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List of abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ÄDEL reform	Long-term care reform
CSN	Swedish National Board of Student Aid
CT	Computer Tomography
DRG	Diagnosis Related Group
EEA	European Economic Area
EpC	Centre for Epidemiology
EU	European Union
EU15	Fifteen countries of the European Union before the expansion of May 2004
FK	Swedish Social Insurance Agency
GDP	Gross Domestic Product
GP	General Practitioner
HIV	Human Immunodeficiency Virus
HSAN	Medical Responsibility Board
IT	Information Technology
KAM	Committee for Alternative Medicine
LFN	Pharmaceutical Benefits Board
MPA	Medical Products Agency
MRI	Magnetic Resonance Imaging
NBHW	National Board of Health and Welfare
NIPH	National Institute of Public Health
OECD	Organisation for Economic Co-operation and Development
OTC	Over the Counter
PPP	Purchasing Power Parity
SBU	Swedish Council on Technology Assessment in Health Care
SDR	Age-standardized death rates
SFS	Swedish Code of Statutes (Svensk författningssamling)
SKr	Swedish Krona
SoS	National Board of Health and Welfare
SOSFS	National Board of Health and Welfare's Code of Statutes
SOU	Reports of the Government's Commission (Statens Offentliga Utredningar)
TEH	Total Health Expenditure
UK	United Kingdom
ULF	Living Conditions Survey
USD	United States Dollar
WB	World Bank
WHO	World Health Organization

List of tables and figures

Tables

Table 1.1	Population/demographic indicators
Table 1.2	Macroeconomic indicators, 1992–2003
Table 1.3	Mortality and health indicators
Table 1.4	Levels of child immunization in Sweden
Table 1.5	Disability-adjusted life expectancy and estimated life expectancy, 1999–2002
Table 1.6	Main causes of death per 100 000 people
Table 1.7	Factors affecting health status
Table 1.8	Decayed, missing or filled teeth at age 12 years (DMFT-12 index)
Table 4.1	Sources of revenue as percentages of total county council revenue, 1998–2003
Table 4.2	Overview of user charges and high-cost protection schemes in 2004
Table 4.3	Trends in health care expenditure in Sweden for selected years (1980–2002)
Table 4.4	Health care expenditure by category, as a percentage of total expenditure on health, 1980–2002
Table 5.1	Emergency care hospital beds, psychiatric hospital beds and long-term care beds per 100 000 people in Sweden, 1980–2002
Table 5.2	Medical technology in Sweden, 1999
Table 5.3	Active licensed health care personnel in the Swedish health care sector (including the private sector), 1995–2002
Table 6.1	Total number of outpatient contacts (publicly financed), 1997–2003
Table 6.2	Maternal and child health for selected years (1985–2002)
Table 6.3	Cases of sexually transmitted infections, acquired immunodeficiency syndrome and HIV for selected years (1985–2003)
Table 7.1	Major health care reforms and policy measures

Figures

Fig. 1.1	Overview of the Swedish health system
Fig. 1.2	Map of Sweden
Fig. 2.1	Organizational chart of the Swedish statutory health system
Fig. 4.1	Financial flow chart of the Swedish health care system
Fig. 4.2	Sources of revenue as percentages of total county council revenue, 2003
Fig. 4.3	Health care expenditure as a share of GDP (%) in the WHO European Region (latest available year)
Fig. 4.4	Trends in health care expenditure as a proportion of GDP (%) in Sweden and some other countries, 1990–2002
Fig. 4.5	Health care expenditure in EUR purchasing-power parity per capita in the WHO European Region (latest available year)
Fig. 5.1	Beds in acute hospitals in Western Europe
Fig. 5.2	Beds in acute hospitals per 1000 people in country and selected other countries, 1990–now
Fig. 5.3	Number of physicians in Sweden and selected countries per 1000 people in 1990–2003
Fig. 5.4	Number of nurses in Sweden and selected countries per 1000 people in 1990–2003

Executive summary

Sweden is a monarchy with a parliamentary form of government. There are three independent government levels – the national government, the county councils and the municipalities. The Swedish population reached 9 million in 2004. Life expectancy in Sweden is among the highest in the world. Diseases of the circulatory system are still the leading cause of mortality, accounting for almost half of all deaths in 2001. The second largest cause of death is cancer.

The Swedish health care system is organized on three levels: national, regional and local. The regional level, through the county councils, together with central government, forms the basis of the health care system. The county councils plan the development and organization of health care according to the needs of their residents. Their planning responsibility also includes health services supplied by other providers, such as private practitioners and physicians in occupational medicine.

In 2002, Swedish health care expenditure was 9.2% of GDP. Health care expenditure expressed in US\$ PPP per capita was 2517 in 2003, slightly higher than the EU15 average of 2326. The Swedish health care system is primarily funded through taxation. Both county councils and municipalities have the right to levy proportional income taxes on their respective populations. In addition to taxation revenue, financing of health care services is supplemented by state grants and user charges. The social insurance system, managed by the Swedish Social Insurance Agency, provides financial security in case of sickness and disability. No basic or essential health care or drug package is defined within Swedish health care.

The aim of primary care is to improve the general health of the population and to treat diseases and health problems that do not require hospitalization. General practitioners provide treatment, advice and prevention. It is up to each

county council to decide how to serve its population with primary care. Primary care is mainly publicly provided. The National Institute of Public Health is responsible for running health promotion and disease prevention programmes at the national level. Preventive and population-oriented health care has been integrated into primary health care.

In Sweden a relatively large proportion of the resources available for medical services have been allocated to the provision of care and treatment at the hospital level. For highly specialized care, Sweden is divided into six large medical care regions, within which the county councils cooperate to provide the population with highly specialized care.

With regard to the training of physicians, the number of medical students is limited, and every year approximately 1100 students join medical training programmes. Medical education is entirely financed by the central government.

Resource allocation principles vary among the county councils. Most county councils have decentralized a great deal of the financial responsibility to health care districts through global budgets. A small group of about five county councils continues to develop per-case payment with expenditure ceilings for some services (primarily hospitals) and capitation models for primary care. The majority of health care providers are publicly owned, and therefore physicians, dentists, pharmacists and other professional groups are mainly salaried employees.

The Health and Medical Services Act of 1982 emphasized a vision of equal health for all. The 1985 DAGMAR reform transferred responsibility for costs of both publicly and privately owned ambulatory health care from the Swedish Social Insurance Agency to the county councils. The main aim of the 1992 ÄDEL reform, the most dominant structural reform of the 1990s, was the transfer of responsibility for providing long-term care to the elderly and disabled from the county councils to the local municipalities. The 1995 Mental Health reform, aiming at improving the quality of life for mental health patients, made the municipalities financially responsible for these patients when they no longer require hospital care, i.e. when they are fully medically treated. Following the 1998 Drug reform, the county councils were given full responsibility over costs of prescribed pharmaceuticals. The reform has given county councils direct incentives to increase prescriber knowledge about pharmaceutical costs and existing consumption patterns.

During the late 1990s several reforms were implemented that targeted patient fees: in 1997, the National Drug Benefit Scheme, which regulates co-payments on pharmaceuticals for patients, was separated from the cost ceiling for medical treatments. Perhaps the most important reform regarding patient

fees was the 1999 Dental Care Reform, which led to the implementation of fixed and nominal subsidies for different types of services, together with free pricing for providers.

Another set of reforms refers to the benefit package. In 1997, county councils were given the right to buy pharmaceuticals for inpatient care directly from pharmaceutical companies. In October 2002, the Pharmaceutical Benefits Board was created, with the responsibility of deciding if a medicine or specific product should be subsidised. With the 2002 New Dental Care Reform, high-cost protection schemes for patients above 64 years of age were implemented.

During the early part of the 21st century, the debate on the Swedish health care system has mainly focused on the need for coordination of care, partly driven by county council cost containment. Since 2003, tendencies have been emerging of a recentralization of specialist and emergency care within geographical areas – for example, smaller county councils have started to cooperate on specialist care in larger regions. In 2003, the Parliamentary Committee on Public Sector Responsibilities was formed, with the purpose of analysing the current separation of responsibilities between the three levels of government.

The Swedish health care sector has undergone several important reforms during the past decades. Generally, national reforms that have had an impact on the health care system have focused on three broad areas: the responsibilities of provision of health care services; priorities and patient's rights in health care; and cost containment. The main remaining challenges include cost containment, integration of care and health inequalities.

The health status of the Swedish population is one of the best in the world. The main strengths of the Swedish health care system include a provision of health care services for all based on need, democratic control and local accountability, control over total expenditures and effective management of clinical activities.

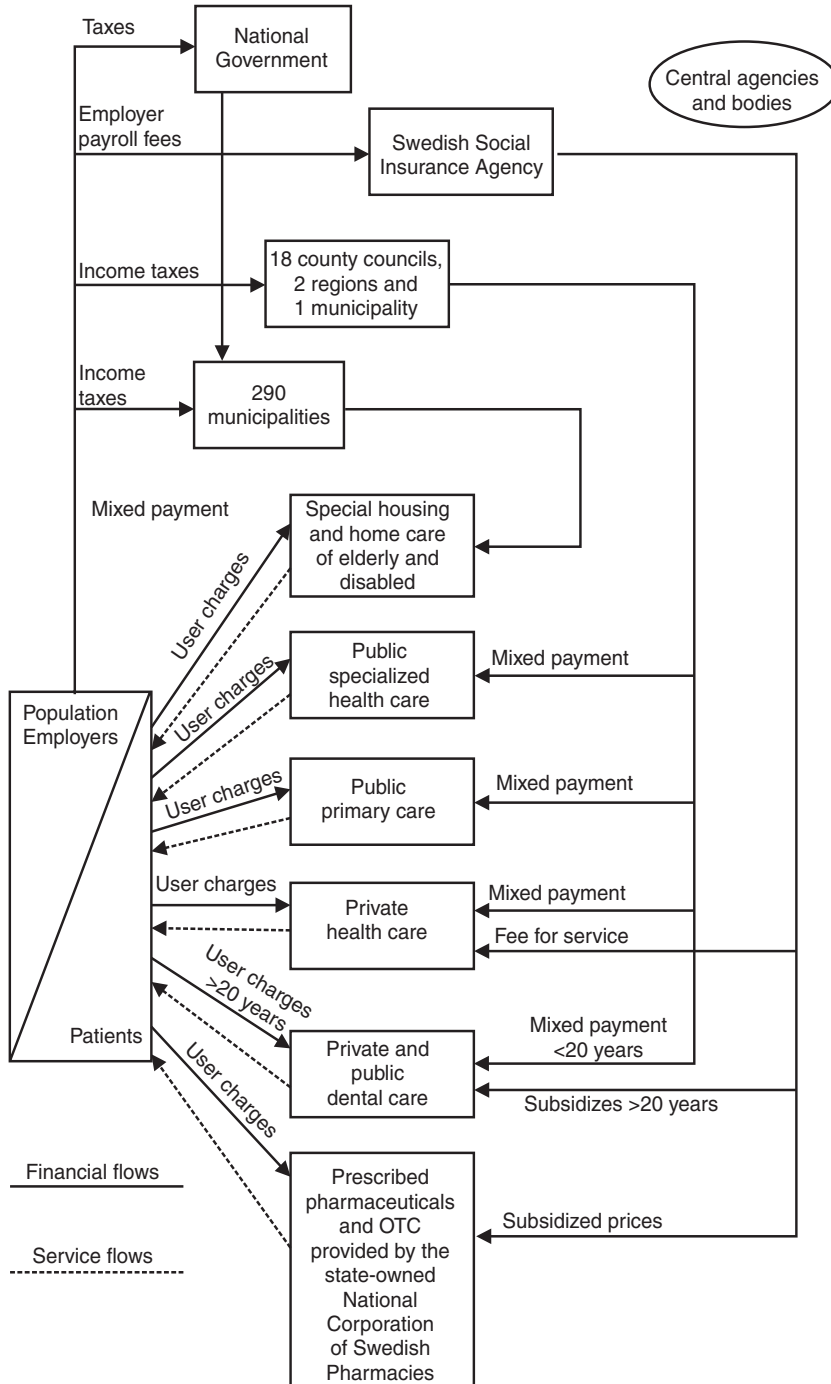
1. Introduction

1.1 Overview of the health system

Quality health care for all is a cornerstone of the Swedish welfare state. The 1982 Health and Medical Services Act not only incorporates equal access to services on the basis of need, it also emphasizes a vision of equal health for all. Three basic principles are intended to apply to health and medical 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 Sweden, there are three independent governmental levels – the national government, the county councils and the municipalities – and they are all involved in health care. In addition, there are a number of central government bodies involved in the Swedish health care system. Overall goals and policies are set at the national level but it is the local authorities that are responsible for the provision of health care in Sweden. Eighteen county councils, two regions and one municipality not belonging to a county council own and run most of the health care facilities. Counties are grouped into six medical care regions to facilitate cooperation regarding tertiary medical care. There are few private hospitals, and the number of private physicians and health centres varies widely between counties. The 290 municipalities are responsible for meeting the nursing-home care, social services and housing needs of the elderly.

Fig. 1.1 Overview of the health system



The health system is primarily funded through taxation. Both the county councils and the municipalities levy proportional income taxes on the population to cover for the services that they provide. 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 and per-capita payments are the most commonly used systems. Physicians and other categories of staff are generally salaried employees.

1.2 Geography and sociodemography

Sweden is situated in northern Europe, bordering Finland and Norway, and covers an area of 449 964 km² (see Fig. 1.2). 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. Because of the Gulf Stream, the climate is mild compared to other areas this far north.

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 Finnish-speaking people of the north-east, and the Sami (Lapp) population. In 2003, 12% of the population were immigrants, originating mainly from the other Nordic countries, the former Yugoslavia and the Middle East. The population reached 9 million in 2004, and approximately 83% of Swedish citizens live in urban areas (Statistics Sweden 2004a). On average, there are 22 inhabitants per km² of land, with a high concentration of people living in the coastal regions and in the south of the country (see Table 1.1). Stockholm, the capital, is the largest city, having 1 684 000 inhabitants in 2002 (Statistics Sweden 2004b). More than 80% 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 web page 2004-11-11).

As in many other industrialized countries, the fertility rate is low (1.64 births per woman in 2002) and Sweden has had negative natural population growth since the late 1990s. However, the population growth rate was 0.36 in 2003 because of a positive net migration flow. The average life expectancy has been rising over the last 30 years, and Sweden now has one of the world's oldest populations: more than 17% of the population are at least 65 years old (see Table 1.1) and 5.2% are at least 85 years old. This ageing of Swedish society has important social and political implications, as fewer persons of productive age are available to provide financial support for the increasing demands being placed on the health care system. It is estimated that by the year 2050, more

Fig. 1.2 Map of Sweden



Source: CIA World Fact Book.

Table 1.1 Population/demographic indicators

	1970	1980	1990	1995	2000	2003
Total population (million) ^a	8 043	8 311	8 559	8 827	8 872	8 925
Population ages 0–14 (% of total)	20.84	19.59	17.93	18.85	18.43	–
Population ages 65 and above (% of total)	13.67	16.29	17.78	17.46	17.26	–
Population density (people per sq km)	–	–	19.02	19.62	19.72	19.91
Urban population (% of total population)	81.0	83.0	84.0	83.0	83.3	–
Fertility rate, total (births per woman)	1.9	1.7	2.1	1.7	1.6	1.7
Live births per 1000 people	13.7	11.7	14.5	11.71	10.2	11.1
Death rate, crude (per 1000 people)	9.5	11.1	11.1	10.6	10.5	–
Age dependency ratio (dependents to working-age population)	0.53	0.56	0.55	0.55	0.56	0.55

Sources: WHO Regional Office for Europe health for all database, Jan 2005, ^aOECD, 2004, World Health Organization, 2004a.

than 23% of the population will be at least 65 years old and 8.4% will be at least 80 years old (Statistics Sweden 2004c).

1.3 Economic context

Sweden has a mixed state/private economy 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 2002, the agriculture, forestry and fishing sectors together accounted for approximately 1.8% of the GDP, whereas the manufacturing sector accounted for 28%. The services sector accounted for 70% of the GDP in the same year (see Table 1.2). Exports of goods and services were equivalent to 43.8% of the GDP during 2003 (Statistics Sweden web page 2004-12-29).

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 as a result of wage and price increases. The late 1980s could be described as a period of overheating. High prices and inflation rates led to a deterioration in Swedish industrial competitiveness, and, when the international business climate began to weaken at the beginning of the 1990s, exports fell.

Exports, as a proportion of GDP, was 22.6% in 1992 (Statistics Sweden web page 2004-12-29). In the early 1990s, employment levels started to decline. Furthermore, during the first half of the 1980s the global trend towards more liberal financial markets, as well as the inefficiency of the financial markets, led the Swedish Government to deregulate the credit market, the capital market and, finally, the currency market. As deregulation was not preceded by political reforms such as changes in the tax system, the incentive to borrow became too high. As a consequence, borrowing increased and savings decreased. In fact, levels of personal debt increased by 50% between 1985 and 1990 (Bäckström 1998).

Increased levels of borrowing, 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. The Swedish Central Bank (Riksbank) tried to defend the krona by adopting high nominal interest rates. In 1992, inflation started to fall, partly because of the effects of the tax reform implemented in 1990–1991 and the fact that wage increases were kept down. Because of the high nominal interest rates and falling inflation rates, which led to high real interest rates, consumption and investments went down, which in turn led to higher unemployment rates of around 10% in 1993–1997 (see Table 1.2). For the local authorities, the high unemployment rates meant that their tax base was being eroded at the same time as their costs were increasing (e.g. for social assistance), which in turn led to pressure to restrain costs.

In order to restore the Swedish economy, the non-socialist government together with the Social Democratic opposition agreed 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 was immediately depreciated by 25% and the employment decline in the export industry and import-competing sectors was eased. In the same year, the Riksbank adopted an explicit inflation target of 2%. In 1995, exports of goods and services were equivalent to 39% of the GDP (Statistics Sweden web page 2004-12-28). Furthermore, the interest rates that had been so high in the first half of the 1990s started to fall in 1995, not least owing to falling expectations of future inflation rates.

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 goals are similar to the convergence criteria established by the European Union (EU), i.e. the public-sector deficit is not to exceed 3% of GDP and the public gross debt is not to exceed 60% of GDP (Government Bill 1994/95:25; Government Bill 1994/95:150). Emphasis was also placed on labour-market development and, in 1996, the Social Democratic

Government laid down specific goals for unemployment, i.e. that unemployment in the open market would not exceed 4% in the year 2000 (Government Bill 1995/96:207).

Female participation in the workforce is high in Sweden: 48% of the labour force were women in 2002. However, part-time work is more frequently held by women than by men. The educational system reaches the entire population, and the literacy rate in Sweden is 99%. In 2004, 27% of the population aged 16–74 years had had a university education. The corresponding figure among those aged 25–49 years was 36% (Statistics Sweden 2004d).

The GDP per capita, measured as purchasing-power parity (current international USD), amounted to 26 656 in 2003. Sweden ranked 26th with respect to per-capita income in the same year (World Bank 2004). In the 2004 United Nations Human Development Index, Sweden ranked second (United Nations 2004).

Table 1.2 Macroeconomic indicators, 1992–2003

Indicator	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GDP (constant SKr), billion	1 665	1 635	1 703	1 772	1 795	1 839	1 906	1 993	2 080	2 103	2 143	2 177
GDP, purchasing power parity (current international USD), billion	154	156	163	173	179	186	194	205	218	225	232	239
GDP per capita (constant SKr), thousands	192.1	187.5	194.0	200.7	203.0	207.8	215.3	225.0	234.5	236.5	240.0	243.1
GDP per capita, purchasing power parity (current international USD), thousands	17.8	17.9	18.6	19.6	20.2	21.0	21.9	23.1	24.5	25.3	26.0	26.7
GDP growth (annual, %)	-1.74	-1.84	4.18	4.04	1.3	2.43	3.64	4.57	4.36	1.13	1.89	1.6
Value added (% of GDP)												
– in industry	28.95	29.04	29.85	31.28	30.22	30.21	30.04	29.56	29.51	28.84	28.20	–
– in agriculture	2.91	2.69	2.76	2.78	2.51	2.44	2.28	2.14	1.93	1.89	1.8	–
– in services etc.	68.14	68.27	67.39	65.94	67.28	67.35	67.68	68.31	68.56	69.27	69.99	–
Labour force (total), thousands	4 691	4 719	4 753	4 780	4 787	4 789	4 791	4 793	4 799	4 799	4 801	4 804
Unemployment, total (% of labour force)	5.70	9.30	9.60	9.00	9.90	10.10	8.30	7.10	5.80	5.00	5.20	–
Official exchange rate (SKr per USD, period average)	5.82	7.78	7.72	7.13	6.71	7.63	7.95	8.26	9.16	10.33	9.74	8.09

Source: World Bank (2004).

1.4 Political context

Sweden is a monarchy with a parliamentary form of government. The King is Head of State, but his position is merely symbolic. There are three independent governmental levels – the national government (Riksdag), the county councils (Landsting) and the municipal councils (Kommuner). Elections are held every fourth year at all three levels.

At the national level, the Swedish people are represented by the Government, which has legislative powers. It has 349 seats, of which 310 are directly elected; the remaining seats are divided among the political parties on the basis of votes received nationally. 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 Social Democratic Party has governed Sweden, supported by a left-wing majority in Parliament, since the 1930s, except for the periods 1976–1982 and 1991–1994. Sweden has been a member of the EU since 1995. 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.

At the regional level, 18 county councils, two regional bodies (Västra Götaland and Skåne) and one municipality not belonging to a county council (Gotland) are in charge of the health care delivery system. Political tasks at this level are undertaken by the county councils and the county administrative boards (Länsstyrelsen). The county administrative boards are government bodies with appointed staff, and have limited responsibility for health care services. Each county council is directly elected by the people of the respective county. Traditionally, county councils and counties have shared the same geographical boundaries. In the 1990s, two larger regions were formed, i.e. Skåne and Västra Götaland, through the merging of two respective three county councils. The county councils' main responsibilities are health and medical care, but also include dental care, public transport, tourism and cultural life in the region. The county councils have the right to levy proportional income taxes on their residents, and the major part of their total income is generated through county taxes. The remainder primarily consists of state grants and, to some extent, user fees.

At the local level, Sweden has 290 municipalities. 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 local issues in the immediate environment of the citizens, e.g. education, care

of the elderly, child care, roads, water, sewage and energy. In addition, to pay for the services that they provide, the municipalities levy separate proportional income taxes on their residents. Municipalities and county councils exist on a parallel basis, so county councils are not superior to municipalities.

Health care is considered a public responsibility in Sweden, and the county councils play a dominant role in the provision of health care services. According to the Health and Medical Services Act of 1982, “every county council shall offer good health and medical services to persons living within its boundaries”, and “promote the health of all residents”. The 290 municipalities are legally obliged to meet the social service and housing needs of the elderly. In the Social Services Act of 1980, it is explicitly stated that the elderly have the right to receive public service 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 Persons with Certain Functional Impairments of 1993 provides for support for items such as personal assistance and daily activities. Most tasks under this Act are the responsibility of the municipalities.

1.5 Health status

The Swedish health care system is a socially responsible system with an explicit public commitment to ensuring the health of all citizens. Life expectancy in Sweden is among the highest of the Nordic countries: in 2003, it was 82.4 years for women and 77.9 years for men. 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. Infant mortality decreased substantially during the same period, from 11 to 3 deaths per 1000 live births in 1970 and 2002, respectively (see Table 1.3). Almost all children had full immunization coverage in 2002 (see Table 1.4). The drop in immunization coverage for measles between 1990 and 2002 was the result of an increased number of parents rejecting immunization because of possible side-effects. All parents are offered immunization for their children (see Section 6.13) and the downward trend in childhood immunization has now been halted according to the latest public health report (National Board of Health and Welfare 2004a; 2005).

Table 1.3 Mortality and health indicators

	1970	1980	1990	1995	2000	2001
Life expectancy at birth, female (years)	77.4	79.1	80.7	81.8	82.3	82.3
Life expectancy at birth, male (years)	72.4	72.9	74.9	76.3	77.5	77.7
Life expectancy at birth, total (years)	74.8	75.9	77.8	79.1	79.9	80.0
Crude death rate per 1000 population, female	9.1	10.0	10.6	10.4	10.7	10.8
Crude death rate per 1000 population, male	10.8	12.1	11.6	10.9	10.4	10.3
Infant deaths per 1000 live births	11.0	6.9	6.0	4.0	3.4	3.7

Source: WHO Regional Office for Europe health for all database, January 2005.

Table 1.4 Levels of child immunization in Sweden

	1980	1990	2000	2002
Infants (%) vaccinated against:				
Measles	56.0 ^a	95.0	94.2	90.5
Mumps	–	95.0 ^c	94.2	90.5
Rubella	–	95.0 ^c	94.2	90.5
Tuberculosis	31.0 ^b	12.0	15.5	15.8
Diphtheria	99.0 ^a	99.0	98.7	98.3
Tetanus	99.0 ^a	99.0	98.7	98.3
Pertussis	–	90.0	98.7	98.3
Poliomyelitis	90.0 ^a	98.0	99.0	98.5
Haemophilus influenzae type b	–	54.9 ^d	98.6	98.2

Source: World Health Organization (2004a).

^a 1981; ^b 1983; ^c 1991; ^d 1993.

Programmes designed to prevent diseases and injuries have been successful in some cases and, in 2002, the disability-adjusted life expectancy in Sweden was 73.3 years compared to an estimated life expectancy of 80.4 years (see Table 1.5). Mortality due to diseases of the circulatory system has been significantly reduced during the last 30 years, and this is one of the major factors contributing to the rise in life expectancy. Nonetheless, diseases of the circulatory system accounted for almost half of all deaths in 2001 (see Table 1.6). The second largest cause of death (during the same year) was cancer, although the mortality from cancer has fallen by slightly more than 14% in the last 20 years. Deaths due to mental illness and diseases of the nervous system, eyes and ears increased between 1970 and 2001.

Programmes designed to prevent accidents have also been successful in Sweden. Since the mid-1970s, deaths due to traffic accidents have been reduced by more than 50%. Currently, Sweden, Norway and the United Kingdom have the world's lowest rates of mortality due to traffic accidents. In 1997,

the Swedish Government adopted so-called “zero-vision”, which implied that there should be no deaths or serious injuries caused by traffic. Work-related injuries and deaths have been significantly reduced during the past 50 years. The decrease has been most prominent in the transport and construction sectors. In 2003, 38 work-related deaths occurred. The number of reported work-related injuries was 6.1 per 1000 working women, and the corresponding figure for men was 8.8 in the same year (National Board of Health and Welfare, 2004a; 2005).

Table 1.5 Disability-adjusted life expectancy and estimated life expectancy, 1999–2002

	1999	2000	2001	2002
Disability-adjusted life expectancy	73.1	71.6	71.8	73.3
Estimated life expectancy	79.5	79.8	80.0	80.4

Source: World Health Organization (2004a).

Table 1.6 Main causes of death per 100 000 people

	1970	1980	1990	2000	2001
SDR, all ages per 100 000 from: all causes	883.9	830.6	714.4	604.6	600.0
Infectious and parasitic disease	8.3	5.4	4.7	6.4	6.8
Tuberculosis			0.8	0.4	0.5
Diseases of the circulatory system	459.2	433.3	339.7	255.3	248.7
Malignant neoplasms	176.7	184.1	166.2	157.1	157.9
Trachea/bronchus/lung cancer	17.3	22.5	23.5	24.6	25.4
Mental disorders and diseases of the nervous system and the sense organs	13.7	18.8	28.8	37.3	37.6
Diseases of the respiratory system	53.8	45.3	48.5	39.3	35.5
Diseases of the digestive system	35.7	30.0	23.3	19.5	19.5
External causes ^a	64.0	59.3	46.8	35.2	38.2

Source: World Health Organization (2004a).

^aData from the Organisation for Economic Co-operation and Development (2004).

Prevention of sexually transmitted diseases was successful during the 1980s and in the first half of the 1990s. However, during the second half of the 1990s and in the early 2000s, the number of reported cases of *Chlamydia* infection, gonorrhoea and syphilis increased, especially among younger people (see Section 6.13). *Chlamydia* is the most common sexually transmitted infection in Sweden. The number of reported cases of infection with *Chlamydia* doubled between 1997 and 2003. In addition, the number of reported cases of human immunodeficiency virus (HIV) infection rose during the early 2000s (National Board of Health and Welfare 2004a; 2005).

During the 1980s and 1990s, the number of daily smokers decreased substantially (from 32.4% in 1980 to 17.8% in 2002; see Table 1.7). In 2003, the proportion of daily smokers was 17% among men and 18% among women. The proportion of daily smokers in Sweden is lower than in any other European country. This reduction 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). Thus, the number of tobacco users might not have changed as much as the statistics on smoking suggest, since oral snuff has replaced smoking in many cases. Surveys indicate that the number of young people who have been in contact with narcotics more than doubled during the 1990s, and that drug abuse is more common in urban than in rural areas. However, from an international perspective, the number of drug abusers is low in Sweden (less than 2 per 1000 inhabitants) (National Board of Health and Welfare, 2004a; 2005).

Although the overwhelming majority of Swedes enjoy good health, according to the latest report on public health and social conditions there are some worrying tendencies, considering self-reported mental illness, alcohol-related problems and overweight (National Board of Health and Welfare 2004a). 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. There has been a continuous decrease in both suicide rates and alcohol-related mortality for more than 15 years. For example, in 1980 the suicide rate was 20 per 100 000 inhabitants, whereas the rate in 2001 was 12.17 per 100 000 (WHO Regional Office for Europe health for all database, 2004, 2005). Alcohol-related mortality has decreased by one-third since the beginning of the 1980s. However, according to the above-mentioned report, both reported anxiety and alcohol consumption increased during 2001, partly because of an increase in the availability of spirits. It is not clear if there are new trends or just temporary fluctuations, but the increases in reported anxiety and alcohol consumption indicate that the declining suicide rates and alcohol-related mortality rates are perhaps about to change. Excess weight and obesity have become more common in all socioeconomic groups since the beginning of the 1980s, but are especially notable among people with a low level of education and among young adults. One possible explanation for the increase in obesity is the reduction in the proportion of daily smokers. Excess weight and obesity have increased more among men than among women, and the most significant reduction in numbers of smokers is also found among men. Furthermore, levels of physical activity during working hours have decreased over the past 20 years (National Board of Health and Welfare 2002a; 2004a; 2005). From an international perspective, however, the level of obesity in Sweden is low (Cutler et al. 2003).

Table 1.7 Factors affecting health status

Factor	1970	1980	1990	2000	2001	2002
Regular daily smokers in the population (% age 15+)	–	32.4	25.8	18.9	18.9	17.8
SDR, selected smoking-related causes of death, per 100 000 people	–	–	299.2	228.1	223.8	–
Pure alcohol consumed (litres per capita, age 15+)	7.9	7.8	7.5	7.0	6.9	–
SDR, selected alcohol related causes of death, per 100 000 people	–	–	79.9	50.0	52.9	–
Overweight (body mass index 25–30) population (% of total population) ^a	–	–	–	33.5	33.5	34.4
Obese population (body mass index >30) (% of total population) ^a	–	–	–	9.2	9.2	10.4

Source: World Health Organization (2004a).

^aData from the Organisation for Economic Co-operation and Development (2004).

The dental status of the Swedish population has generally improved during the last 30 years, particularly among children. In 2002, the average number of decayed, missing or filled teeth was 1.1 among 12-year-olds (see Table 1.8).

Table 1.8 Decayed, missing or filled teeth at age 12 years (DMFT-12 index)

	1977	1990	2000	2002
DMFT	6.3	2.0	1.0	1.1

Source: World Health Organization (2004b).

2. Organizational structure

2.1 Historical background¹

The current structure of the Swedish health care system reflects its long history. In the seventeenth century, towns and cities employed physicians to provide publicly provided care. In rural areas, where the majority of the population was living at the time, the central government employed physicians for the provision of basic medical care.

Sweden's first hospital, the Serafimerhospital, was set up in Stockholm in 1752. It had eight beds that were supposed to fulfil the hospital needs of both the entire Swedish population and of Finland (which was, at the time, ruled by Sweden). In 1765, an agreement between the four estates paved the way for the establishment of a number of hospitals by permitting local authorities to spend locally collected resources on the construction of hospitals. A hundred years later, Sweden had 50 hospitals and approximately 3000 beds. Most of the hospitals were small, with only 10–30 beds each, and initially they only had one physician each. Physicians outside the hospitals provided most of the health care services. 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 1862, the county councils were established and, over the years, health care grew to become one of their principal duties. This marked the beginning of the development of the structure of the present Swedish health care system. Responsibilities were gradually transferred from central government to the county councils. Only the emergency care general hospitals changed ownership in the 1860s, and it was not until the Hospitals Act 1928 was introduced that

¹ This section is mainly based on Anell and Claesson (1995).

the county councils became legally responsible for providing inpatient hospital care to their residents. This Act formed the basis of the current responsibilities of the county councils. However, responsibility for provision of outpatient care was not included in the Act, and treatment of some patient groups, e.g. mental and long-term patients, was excluded from the general rule. In the 1930s, the county councils were gradually given responsibility for various health care services, such as maternity and paediatric health care, child dental care, etc. Ambulatory care was offered primarily by private practitioners in their own offices or at the hospital. 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 in hospitals.

After the Second World War, the first important step towards universal coverage for physician consultations, prescription drugs and sickness compensation was taken, when a National Health Insurance Act was voted in by the Parliament in 1946. The plan was for expenditures on physician consultations and prescribed drugs to be reimbursed but, because of financial constraints, the Act was not implemented until 1955.

In the post-war era, a considerable expansion of the Swedish health sector began, particularly in the hospital sector. New therapeutic and diagnostic procedures created new subspecialties both among physicians and with regard to hospital structures. As living standards and technology improved, so did the health of the Swedish population, and the eradication of some diseases, e.g. tuberculosis, began. Like for most other countries of Western Europe during this period, the Swedish health care delivery system became hospital-based: approximately 90% of health care expenditure was consumed by hospitals. In 1963–1966, the county councils assumed responsibility for general practitioners working in rural areas, and in 1966–1968 they assumed responsibility for care of the mental health patients. These two areas were previously the responsibility of central government. Thus, by the end of the 1960s, the county councils had been given responsibility, to a great extent, for the provision of health and medical services.

In 1968, the Royal Medical Board merged with the Royal Board of Welfare to form the National Board of Health and Welfare which, today, is still responsible for the supervision of health care, acting as the Government's central advisory and supervisory agency. It is also responsible for health and social services statistics. The National Corporation of Swedish Pharmacies (Apoteksbolaget) was founded in 1971 when private retail distribution was nationalized.

In 1970, as part of the “seven-crown reform”, outpatient services in public hospitals were taken over by the county councils. Patients paid SKr 7 to their county council for each outpatient consultation, and the county council

was compensated directly by the national health insurance authority for the remainder of the cost. The considerably reduced fee incurred by the patient made health care more accessible for low-income groups. Previously, the patient paid the entire cost of the consultation (out-of-pocket payment) and was then reimbursed by the national health insurance authority for 75% of the amount. Thus, the individual did not know what the cost would be in advance. The reform also meant that physicians in hospital outpatient departments became salaried employees of the county councils. In addition, physicians were no longer allowed to treat private patients seeking outpatient care in county council facilities. Before the reform, physicians received a combination of fixed salary and fee-for-service payments. Senior doctors could top up their salaries by seeing private patients in the county council outpatient facilities, for which the physicians paid a fee to the county council.

During the 1980s, responsibility for health care planning was decentralized from the national level to the county councils. The overall objective for public health services was stated in the 1982 Health and Medical Services Act as the provision of “good health care on equal terms for the entire population”. According to the Act, “every county council shall offer good health and medical services to persons living within its boundaries ... In other respects too, the county council shall endeavour to promote the health of all residents.” The Act gave the county councils full responsibility for matters relating to health care delivery, i.e. they were responsible for providing not only health care, but also health promotion and disease prevention, for their residents. Two university hospitals (the Karolinska Hospital in Stockholm and the Academic Hospital in Uppsala) came under the ownership of the county councils in the early 1980s, as did responsibility for public vaccination programmes.

In 1985, a reform of the health insurance system, the DAGMAR Reform, was introduced. Health-insurance reimbursement for ambulatory care, both public and private, was no longer transferred to the county council according to the number of outpatient visits. Instead, a reimbursement formula based on capitation, adjusted by needs-related social and medical criteria, was adopted. Reimbursement to private providers had previously been made directly from social insurance on a fee-for-service basis. Starting in 1985, the capitation-based reimbursement given to a county council one year was reduced by the sum paid to private doctors and physiotherapists in that county council in the previous year. In fact, county councils were made financially responsible for publicly financed private care. The direct responsibility was given to county councils in 1994. After a short period during which doctors and physiotherapists had the right to establish practices wherever they wanted, the county councils got the authority to decide on new establishments and transfers of existing establishments. A national reimbursement scheme is negotiated between the Federation of County

Councils and the trade unions of doctors and physiotherapists, and is decided by the Government. A doctor or physiotherapist with an establishment can work either within the national reimbursement scheme or on a contract with the county council. The latter arrangement is favoured by the legislators and the county councils. It usually gives doctors/physiotherapists more money, but the practitioners have to abide by some agreed rules.

In 1992, a major change was introduced through the ÄDEL Reform, whereby the responsibility for long-term inpatient health care and care for the elderly was transferred from the county councils to the local 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). Through these reforms, about one fifth of total county council health care expenditure was transferred to the municipalities.

In an attempt to curb the increasing expenditures for pharmaceutical products, a “drug reform” was initiated in 1998 when the county councils took over (from the State) financial responsibility for prescription drugs. In addition, the patients’ share of the drug costs was increased, as a result of a reformed National Drug Benefit Scheme. In 2002, the Pharmaceutical Benefits Board (Läkemedelsförmånsnämnden or LFN, the acronym by which the Board is known internationally) was introduced. The introduction of LFN has markedly changed the principles of pricing and reimbursement of drugs in Sweden. The Board makes decisions based on cost-effectiveness data; pharmaceutical companies must submit economic evaluations, when relevant, as part of their applications for reimbursement.

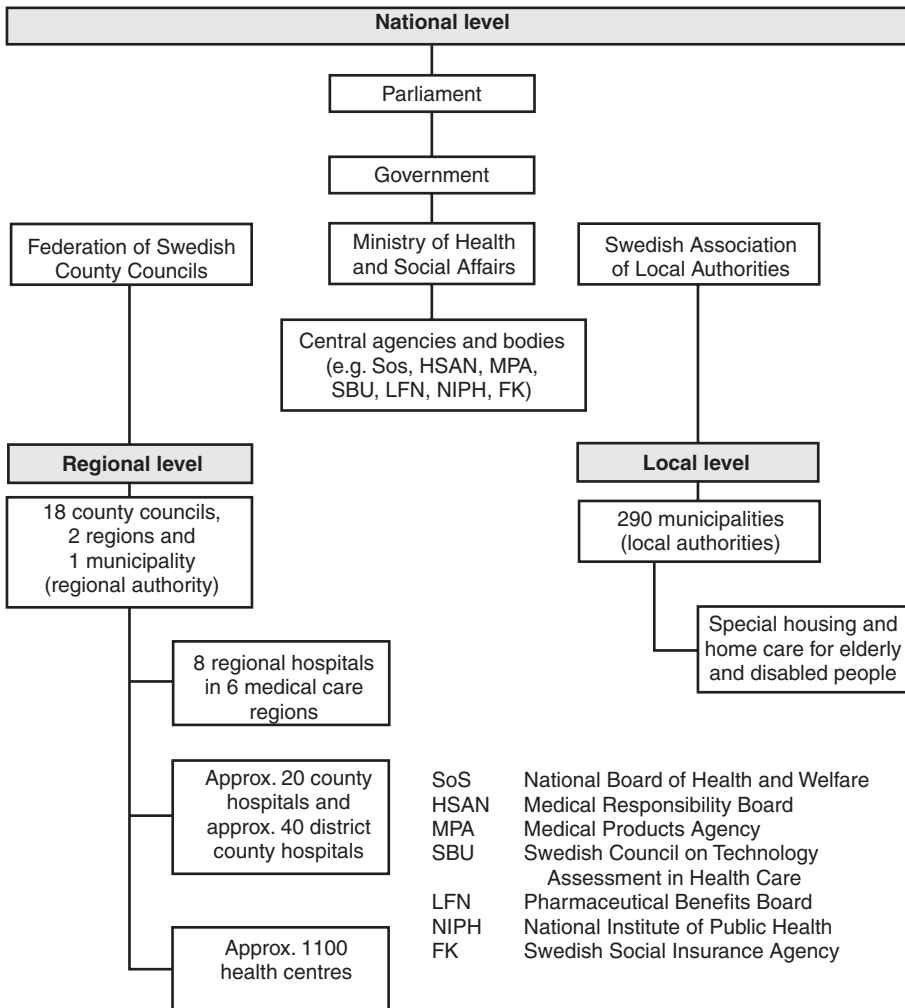
2.2 Organizational overview

2.2.1 National level

The Swedish health care system is a regionally based, publicly operated health service. It is organized into three levels: national, regional and local (Fig. 2.1). The regional component, operating through the county councils, together with central government, forms the basis of the health care system. Overall responsibility for the health care sector rests, at the national level, with the Ministry of Health and Social Affairs.

The principal responsibility of the Ministry of Health and Social Affairs (Socialdepartementet) is to ensure that the health care system runs efficiently

Fig. 2.1 Organizational chart of the statutory health system



and according to its fundamental objectives. It prepares cabinet business and deals with policy matters and legislation in health care, social welfare services and health insurance. It allocates financial assistance directed at very specific treatments, and acts as a supervisor of activities in the county councils, e.g. the Government may legislate for temporary ceilings on county council and local municipality tax rates.

The National Board of Health and Welfare (Socialstyrelsen), a semi-independent public authority, has a supervisory function over the county councils, acting as the Government’s central advisory and supervisory agency

for health and social services. The Board supervises implementation of public policy matters and legislation in health care and social welfare services. Its most important duty is to follow up and evaluate the services provided in order to see if they correspond to the goals laid down by the Government. Furthermore, it keeps official statistics on health and health care. The Board includes the Centre for Epidemiology (Epidemiologiskt Centrum), whose objective is to describe, analyse and report on the distribution and development of health and diseases.

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. 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 Ministry of Health and the National Board of Health and Welfare collaborate with other central government bodies. The most important are the Medical Responsibility Board (Hälso- och Sjukvårdens Ansvarsnämnd, HSAN), the Medical Products Agency (MPA) (Läkemedelsverket), the Swedish Council on Technology Assessment in Health Care (Statens Beredning för Medicinsk Utvärdering, known internationally by its Swedish acronym, SBU), the Pharmaceutical Benefits Board (Läkemedelsförmånsnämnden, LFN) and the National Institute of Public Health (Folkhälsoinstitutet) (Fig. 2.1).

HSAN is a government agency that decides on disciplinary measures in the event of complaints or possible malpractice (see Section 2.5.2).

The MPA is the Swedish national authority responsible for 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 Agency. 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 Agency acts both as a formal regulatory authority and as an informal promoter of the rational development and use of new and existing medicinal products. In addition to having national responsibilities, the MPA investigates medicines under consideration at EU level, in collaboration with national drug regulatory authorities in other European countries. All activities of the MPA are financed through contracts and fees, which vary depending on the service provided.

LFN is an independent government agency, which started operating on 1 October 2002. The primary task of LFN is to decide if a medicine or product is to be included in the pharmaceutical benefits scheme, and to set the price. It has to give special consideration to cost-effectiveness and marginal utility in its review process. The reason for having a national agency deciding which

drugs should be subsidized is that pharmaceutical benefits should be equitable for the entire Swedish population (Pharmaceutical Benefits Board 2002). It is primarily the cost-effectiveness of various products that is assessed, and not the medical indications. However, the Board may make exceptions and decide that reimbursement for a drug should be allowed for a certain indication or subgroup of patients. Thus, LFN may decide to allow reimbursement for a drug for a narrower indication than that for which the drug has been licensed for marketing by the MPA.

The primary objective of SBU is to promote the use of cost-effective health care technologies. SBU has the mandate of the Swedish Government to review and evaluate health care technology from medical, economic, ethical and social points of view. Information on results is disseminated to central and local government officials and medical staff to provide basic data for decision-making purposes.

The National Institute of Public Health is a state 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 National Institute of Public Health are to promote health and prevent diseases by providing the Government, state agencies, municipalities and county councils with knowledge based on scientific evidence. It exists to develop and disseminate methods and strategies in the field of public health, to perform cross-sectoral follow-up and evaluation of national public-health policies and to exercise supervision in the areas of alcohol, drugs and tobacco use.

The National Corporation of Swedish Pharmacies (Apoteket AB) is a state monopoly that owns all of the pharmacies and thereby maintains a countrywide distribution system. It operates hospital pharmacies under one-year contracts with the county councils as well as community pharmacies. In 2004, there were 880 pharmacies, of which 80 were located in hospitals. In remote areas, the distribution is covered by approximately 1000 accredited agents, usually grocery stores (National Corporation of Swedish Pharmacies web page 2004-11-18). The National Corporation of Swedish Pharmacies is responsible for ensuring a good drug supply at uniform prices throughout the country, which means that all approved pharmaceutical products must be available at all pharmacies. In addition, the National Corporation of Swedish Pharmacies is responsible for providing the public and physicians with fact-sheets and other information about drugs.

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 (leave), a basic retirement pension, a supplementary pension, child allowance, income support and housing allowance. In addition, the Agency's tasks also include 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 which processes individual cases at the regional and local levels. There are also 240 local offices serving local residents.

In May 2003 it was decided that the Federation of Swedish County Councils (Landstingsförbundet) and the Swedish Association of Local Authorities (Svenska Kommunförbundet) should be merged into one organization by 1 January 2007. On 1 January 2005, the Swedish Association of Local Authorities and the Federation of Swedish County Councils formed shared headquarters with joint administrative units – The Swedish Association of Local Authorities and Regions (Sveriges Kommuner och Landsting). The Federation of Swedish County Councils is a collaborative nationally oriented organization for the county councils, whereas the Swedish Association of Local Authorities and Regions represents a corresponding organization for the municipalities. The organizations strive to promote and strengthen local self-government and provide local authorities with expert assistance. In addition, they work as the employers' central association for negotiating wages and terms of employment for the personnel employed by the county councils and municipalities. Their activities are financed mainly by members' fees.

2.2.2 Regional level

At the regional level, 18 county councils, two regional bodies (Västra Götaland and Skåne) and one municipality not belonging to a county council (Gotland) are in charge of the health care delivery system, from primary care to hospital care (including public health and preventive care). The county councils have the overall responsibility for all health care services delivered, and have authority over hospital structure. The executive board of the county council, or an elected hospital board, decides how to organize the management. Executive staff members of the board ensure that health care delivery runs efficiently.

In 1999, two larger regions were formed by the merging of some county councils. For a trial period up to the year 2006, these two regions have been given additional responsibilities, e.g. for the business sector, culture, roads and public transport. These areas used to be managed by the Government, through the county administrative boards (Länsstyrelsen). Region Skåne was established by merging the Kristianstad and Malmöhus county councils. Simultaneously, the city of Malmö entrusted the new region with responsibility for health and medical services for its citizens. Västra Götaland Region was formed by merging

the county councils Skaraborg, Älvsborg and Bohus into one region. Västra Götaland Region also took over the responsibility of providing health and medical services to the citizens of the city of Göteborg (Palme et al. 2002).

The merging of county councils into larger regions has been driven by the increased pressure on county councils to contain costs and to increase efficiency. A similar trend towards hospital mergers can be identified, and traced back to the mid-1990s (Harrison and Calltorp 2000). There is a belief that the merging of hospitals and the formation of larger regions will make the objectives of cost containment and increased efficiency easier to meet.

Primary health care areas consist of one or several primary health care centres. A primary health care area usually has the same geographical area of responsibility as the local municipality, although larger municipalities usually have more than one health care area.

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. Each region serves a population averaging more than 1 million people.

According to the 1982 Health and Medical Services Act, the county councils are required to provide for and promote the health of their residents and to offer equal access to health care. They also need to plan the development and organization of health care according to the needs of their population and the resources given.

The county councils also regulate the payment of private health care providers. A private health care provider must have an agreement with the county council in order to be reimbursed from social insurance. County councils regulate the establishment of new private practices and the number of patients that private practitioners can see during a year. If the private provider does not have any agreement or if the private provider does not use the regulated fee schedule, the provider is not reimbursed and the patient will have to pay the full charge to the provider.

2.2.3 Local level

At the local level, there are 290 municipalities with their own areas of responsibility. The population varies from less than 3000 to approximately 760 000 individuals. 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 matters that might 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 municipalities are members of the Swedish Association of Local Authorities, which is a collaborative nationally oriented organization that aims to promote and strengthen local self-government and to provide local authorities with expert assistance.

The responsibilities of a municipality include issues relating to the immediate environment of the citizens, e.g. 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 of the elderly, the disabled and long-term psychiatric patients. Patients who have been fully medically treated and have been discharged from acute-care or geriatric hospitals also fall within the remit of the municipalities. The municipalities operate public nursing homes and home care. The social services employ a large number of staff – 215 000 in 2001 – and about 90% of them work in care and nursing for the elderly and disabled. The workforce in the social services sector is strongly dominated by women (90% in 2001) (Swedish Association of Local Authorities 2004).

2.3 Decentralization and centralization

Sweden has a long tradition of local self-government. The responsibility for health care is decentralized to regional and local governments, with the exception of overall goals and policies, which are determined at national level. The political responsibility for the financing and provision of health services lies with the county councils, whereas local municipalities are responsible for delivering and financing long-term care for the elderly and the disabled, and for long-term psychiatric care. Both the county councils and the municipalities have the right to levy proportional income taxes on their populations to finance these activities. The local municipalities are not subordinated, or accountable to the county councils.

The process of decentralization has been dynamic. There has been constant oscillation between centralization and decentralization in Swedish health care organizations (Axelsson 2000). Decentralization of responsibilities within the Swedish health care system does not only refer to legislative devolution between central and local government, but also to decentralization within each county council. Since the 1970s, financial responsibility has been decentralized

within each county council, and the degree of decentralization, organization and management varies considerably among county councils.

By the end of the 1970s, it was evident that county council revenues would not increase at the same pace as before, and cost containment became an important issue. Furthermore, the expansion and differentiation of the sector had made it difficult to plan and manage the provision of health services by means of detailed long-term plans of counties. Incentives that would increase productivity and efficiency became important elements in the future development of planning and management systems. Generally, several local health care districts within each county council were formed, each having overall political responsibility for the health of its residents. In the 1980s, global budgets were introduced. Districts became responsible for resource allocation within their geographical areas, and central county councils managed the allocation of the budget among the districts. Many districts, most of which managed a hospital and several primary health care centres, started practising the same principles of global budgeting within the district. Financial responsibilities were decentralized to hospital department and primary health care centre levels. The professional heads of department were cost-liable for their activities. This can be seen as a shift in focus – from politicians to professionals – with respect to the planning of health services. Another interpretation is that it gave the politicians at local level more comprehensive responsibility.

The introduction of global budgeting and cost centres was not sufficient with regard to efficiency and cost containment. Although the system performed well with respect to cost containment, productivity was still considered low. In the late 1980s, cost-centre management was accordingly replaced with systems of transfer pricing; health-service providers were to be reimbursed through prospective per-case payments instead of through activity budgets. Today, payments to both hospitals and primary care centres are based on global budgets in about 50% of the county councils. Among the others, a smaller group of about five county councils continue to develop per-case payment with expenditure ceilings for some services (primarily hospitals) and capitation models for primary care. In another group of a similar size, payment for primary care has been moved in the direction of capitation, whereas global budgets are used for all other services.

Most health care facilities are owned and operated by the county councils. There are few private hospitals in Sweden, and the numbers of private physicians and health centres vary widely among the county councils. In some urban county councils, up to 60% of primary care physicians may be private practitioners, whereas in other county councils only a few private practitioners can be found. The proportion of practitioners employed by private providers increased from 14.9% to 17.5% between 1993 and 1999 (National Board of Health and Welfare

2002b). The same variation in the public/private mix of providers can be found across municipalities. In total, the proportion of elderly people receiving nursing-home care or home-help services from private providers contracted by municipalities increased from 5.1% to 10.6% between 1994 and 2002 (National Board of Health and Welfare web page 2005-01-17).

2.4 Population 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 EU/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.

Swedish health care is considered to be accessible and of high quality, and expectations regarding health care are very high among Swedes. An important part of the objective of assuring that the entire population receives good health care on equal terms is that the health sector provides care within the limits of its economic resources. There are three basic principles underpinning the decisions and priorities concerning health and medical care in Sweden, as follows:

- the principle of human dignity
- the principle of need and solidarity
- the principle of cost-effectiveness.

The principles are ranked such that the principle of human dignity takes precedence over the principle of need and solidarity; the principle of cost-effectiveness is subordinate to the other two. These fundamental principles state that care should be provided on equal terms and according to need, that it should be managed democratically and that it should be financed on the basis of solidarity. The three basic principles have been converted into four priority groups, i.e. medical conditions and patient groups with different needs for health and medical care. An addition to the Health and Medical Services Act regarding priorities in health care was made in 1997, to regulate how patients should be prioritized depending on the type of medical problem. Those patients who have the greatest need of care should have priority over other patients. National guidelines stating who is regarded as having greater need than others are included in the law. The priority groups include the following (SOU 2001:8) (see Section 7.1):

- care of life-threatening diseases, palliative care and care of people with chronic diseases and disabilities
- preventive and rehabilitative services
- care of patients with non-acute and non-chronic diseases
- care for reasons other than illness or injury.

Besides the basic principles, there are a number of laws and regulations intended to guarantee that the entire population is covered by the health care system. The Health and Medical Services Act of 1982, the Social Services Act of 1980 and the Act Concerning Support and Service for Persons with Certain Functional Impairments of 1993, oblige the county councils and municipalities to promote health and to offer good health, medical and social services to all citizens. Thus, all citizens are, by law, entitled to good-quality care irrespective of their income or geographical location. Central government grants to the county councils and municipalities are partly based on a formula that reallocates resources across municipalities and county councils on the basis of demographic, geographic and socio-economic indicators. The purpose is to give local government bodies in different areas the opportunity to maintain similar standards (see Section 4.2).

With respect to elective treatment, long waiting lists are a problem. In 1992, a 3-month guarantee was issued for 12 selected treatments. The treatment guarantee meant that if a county council could not provide treatment within 3 months, the patient was to be offered treatment at a hospital in another county or at a private facility. Nonetheless, long waiting lists for elective treatment continue to be a challenge for the county councils. These waiting lists may be one of the reasons behind the growing market for voluntary health insurance in Sweden (see Section 4.1.4) On 1 November 2005, a new maximum waiting-time guarantee was introduced in Sweden. This new guarantee should put the patient in a stronger position, improve accessibility, and make it possible for the situations in different parts of the country to become more equal. The guarantee is based on the “0–7–90–90” rule, i.e. (1) instant contact (zero delay) with the health care system; (2) consultation with a general practitioner within 7 days; (3) consultation with a specialist within 90 days and; (4) a wait of no more than 90 days between diagnosis and treatment. The guarantee will be the same all over the country and cover all elective care in the county councils.

2.5 Entitlements, benefits and patient empowerment

2.5.1 Entitlements and benefits

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. Priorities should be determined according to the three basic principles – the principle of human dignity, the principle of need and solidarity and the principle of cost-effectiveness – outlined in Section 2.4. In the event of sickness or injury, the patient is assured of medical attention from institutions that have the competence and resources to handle that individual's needs. With the exception of reduced subsidies for dental care, there have been no major changes in the benefits package over the last 20 years.

Under the terms of the social insurance scheme, the patient pays the entire cost of prescribed pharmaceutical preparations listed in the Drug Benefit Scheme up to SKr 900. Above this, a rising scale of subsidy operates, with a high-cost ceiling of SKr 1800 over a 12-month period. Pharmaceuticals not listed in the Drug Benefit Scheme are only available following full payment by the patient.

2.5.2 Patient empowerment

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. Every Swede is formally entitled to choose his/her primary care physician, but in most county councils individuals can also seek care directly from hospitals, thereby bypassing primary care. In fact, nearly half of all visits to the doctor take place in hospitals. An individual can also seek care at a health centre or hospital outside his/her own health care district or county council. In practice, however, cross-border care between county councils is not encouraged. Although politicians may accept that choices are limited in reality, most of them may well feel that advocating specific restrictions is too much of a departure from the earlier promises of unrestricted access to health care.

Several different bodies share the task of safeguarding patients' interests with regard to receiving adequate and safe health care. The health care system

is responsible for strengthening the position of the patient by the following means: individualized information; opportunities to choose between alternative treatments; and ensuring the right to a second opinion in cases of life-threatening conditions or very serious disease/injury. Every county council and municipality must have a patients' committee, representing patients' associations, etc., to support individual patients and contribute to quality improvement in the health care system. The committee is intended to achieve these goals by helping patients access the information they need to safeguard their interests; by promoting contact between patients and health care personnel; by helping patients to get in touch with appropriate agencies; and by reporting (to care providers and care units) observations and irregularities that are of significance to patients (Government Offices of Sweden web page 2005-01-23).

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 must report the incident to the National Board of Health and Welfare. Board members aim to identify problems and deficiencies in order to improve the processes and structure of the health care system.

Another important means of dealing with patients' complaints in Sweden is through HSAN. Patients or their relatives make referrals to this Board. With regard to patients' complaints, the main difference between HSAN and the National Board of Health and Welfare is that the former carries out an analysis of possible faults or negligence attributable to medical staff. HSAN – a separate authority whose organization is similar to that of a court – can decide on disciplinary measures. HSAN is the government agency that decides on disciplinary measures in the event of complaints or possible malpractice. The Board can enforce disciplinary measures such as a warning, or can limit – or even withdraw – a health care professional's right to practise. In 2002, 3227 complaints were made, and the Board judged a similar number of cases. Approximately 75% of all cases concerned physicians. The average handling time is 5 months, and approximately 20 withdrawals of health care professionals' right to practise are made every year (Medical Responsibility Board web page 2005-03-11). 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.

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 2003). During 1997, approximately 8000 complaints were made. This figure increased to approximately 9000 in the year 2000 and has been stable since then. During 2004, SKr 300 million were paid in compensation to patients who had suffered injuries that could have been prevented. Normally, the amount of compensation is around SKr 20 000 per patient (County Councils' Mutual Insurance Company 2005).

3. Planning and regulation

Three political and administrative levels operate in Sweden: the central government, the county councils and the municipalities. All levels play important roles in the welfare system and are represented by directly elected political bodies that have the right to levy proportional taxes on the population in order to finance their activities.

It is the 21 county councils (including the two regions and one municipality not belonging to a county council) – (see Section 2.2.2) that are responsible for providing health services and for striving to achieve a good standard of public health. The population of these 21 areas varies between 60 000 and 1.8 million people. It is the county councils that own and run the hospitals, health centres and other health institutions, supplemented by private providers which, in most cases, have contracts with the county councils to provide certain services. Contracting out of certain health care services has increased in some regions. It is mainly in the larger urban health care regions that contracting-out has become increasingly common.

3.1 Regulation

The responsibility for providing health and dental care and care for the elderly and disabled is decentralized to the county councils and municipalities. An important role for the central government is the establishment of basic principles for health services, through legislation and recommendations. Since the 1990s, the central government has also become more active in formulating programmes agreed upon with the county councils and linked to national grants. Such programmes have targeted, among others, primary care, psychiatry and care of the physically disabled.

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. The county councils are expected to plan the development and organization of health care according to the needs of their residents. Planning responsibilities also include health services supplied by other providers, such as private practitioners and physicians in occupational medicine. Care for the elderly and the disabled is regulated by the Social Services Act of 1980, which states that the elderly 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 Persons with Certain Functional Impairments (LSS 1993:387). Most tasks articulated in these two Acts are the responsibility of the municipalities. The most important law regarding dental care is the Dental Care Act of 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.

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 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 and evaluate the services provided to determine if 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.

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 Medical Products Act of 1992 constitutes the basis for all activities connected with pharmaceuticals and drug distribution in Sweden. Since 1993, alternative medicines have also been regulated, like other drugs, under the 1992 Medical Products Act. The Act on Retail Trade in Drugs is a special law that gives the State the exclusive right to conduct retail trade in drugs; the Government decides by whom, and on what terms, retail trade in drugs can be conducted. The State has assigned this exclusive right to the National Corporation of Swedish Pharmacies. The supply of pharmaceutical products

is also the responsibility of the National Corporation of Swedish Pharmacies. Since the reform of 1998, the county councils have been responsible for the overall cost of drugs. In conjunction with this reform, patient fees for prescribed drugs are charged according to a specified scheme. The list of drugs included in the National Drug Benefit Scheme is established by LFN. For prescription drugs that are not subject to reimbursement, i.e. those that are not included in the National Drug Benefit Scheme, patients pay the full price. The National Drug Benefit Scheme is administered by the National Corporation of Swedish Pharmacies.

The fundamental requirements for medicinal products stated in the Medicinal Products Act (1992:859) also apply to natural remedies. A medicinal product must be of high quality, efficacious for its purpose and, in normal usage, not have harmful effects. The medicinal product must include a complete declaration of its contents, have an acceptable and clear name and be clearly branded. The manufacture must be carried out in accordance with guidelines set out in Good Manufacturing Practice for Medicinal Products. A new nature-cure medicine should only be sold when the MPA has granted marketing authorization. The authorization is valid for 5 years and can then be renewed for a further 5-year period. The major difference between natural remedies and other drugs is that the nature-cure products are not included in the national reimbursement system.

3.1.1 Regulation and governance of third-party payers

Both the financing and the organization of health care services are primarily the responsibility of the county councils. The health care facilities are, in most cases, also owned and operated by the county councils. Thus, responsibility for financing and provision of care is integrated (see Sections 4.1–4.4).

County councils regulate the private practitioners' market in the sense that, by approving an establishment, a county council also approves public reimbursement for the respective practitioner. 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 (see Section 3.1.2 for the conditions that private practitioners must fulfil in order to be reimbursed). Private health centres and practitioners are relatively common in major cities and in urban regions. In 2002, 27.3% of all physician consultations in outpatient care with public funding were conducted at private facilities (Federation of Swedish County Councils 2004a).

The market for voluntary health insurance is growing in Sweden. However, it is still small in comparison with other European countries. In 2003, about 200 000 people (2.3% of the Swedish population) had supplementary insurance

(Swedish Insurance Federation 2004). One of the reasons behind the growing market for voluntary health insurance is the presence of long waiting lists for elective treatment under the county councils. The main benefit of having supplementary insurance is the ability to get quick access to a specialist in ambulatory care, when needed. Another benefit might be the possibility of jumping waiting lists for elective treatment.

3.1.2 Regulation and governance of providers

Within the system overall, county councils have many different patterns of care. Most providers including dental clinics operated by county councils and the state-owned monopolistic chain of pharmacies, are publicly owned. Primary care is provided at local health centres, at family physician surgeries, by private physicians and physiotherapists, at district nurse clinics and at clinics for child and maternity health care.

Hospitals in Sweden are divided into regional hospitals, central county hospitals and district county hospitals, depending on their size and degree of specialization. In the approximately 40 district county hospitals, there are at least four specialties: internal medicine, surgery, radiology and anaesthesiology. At the county hospitals, the levels of medical competence and equipment enable treatment of patients suffering from almost all kinds of conditions, including psychiatric problems. Both inpatient and outpatient care are provided. Currently, there are approximately 20 central county hospitals in Sweden, i.e. one hospital for each county council area. In these hospitals, there are about 15–20 specialties. Patients with complex and/or rare diseases and injuries that need highly specialized care are attended to at one of the eight regional hospitals.

For highly specialized care, and for research and medical training of doctors, the county councils cooperate in six medical care regions. The population of these regions varies from 1 to 1.9 million and in each medical region there is at least one university hospital. This collaboration is based on agreements between the county councils in the region – for example, on the prices charged for highly specialized care. The regional medical care system is responsible for patients whose medical problems require the collaboration of a large number of specialists and sophisticated diagnostic or treatment facilities.

Physicians, dentists, pharmacists and other professional groups are mainly salaried employees. The National Board of Health and Welfare has a supervisory function over all health care personnel. The Board is also the licensing authority for physicians, dentists and other health service staff. The licences are not given for a specific period of time, i.e. 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 HSAN. Every physician who intends to offer private health care must notify this to the National Board of Health and Welfare. Furthermore, for private health care providers to be publicly funded, an agreement on health care provision has to be made with the county council. The agreement is normally concluded after a public procurement. The private health care providers are reimbursed in accordance with the conditions in the agreement.

A limited (and decreasing) number of private physicians (1107 in 2004) and physiotherapists (1449 in 2004) have an agreement of cooperation with the county council. These physicians and physiotherapists are reimbursed by the county councils per visit/call in accordance with a fee scale determined by central government. To be able to make an agreement of cooperation, three conditions must be fulfilled: (1) the private physician or physiotherapist cannot be employed by the county council; (2) he or she must work full time in private practice; and (3) he or she must be less than 70 years of age.

Several bodies share the task of safeguarding patients' interests in receiving adequate and safe health care, e.g. patients' committees, the National Board of Health and Welfare and HSAN. Every institution providing health services has a legal obligation to provide compensation for injuries that occur in the course of their services. 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. The institutions are insured to meet demands for financial compensation from patients who have suffered such injuries (see Section 2.5.2).

3.1.3 Regulation and governance of the purchasing process

See Section 4.3.

3.2 Planning and health-information management

3.2.1 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. SBU

has the mandate of the Swedish Government to review and evaluate health care technology from medical, economic, ethical and social points of view.

SBU reviews the benefits, risks and costs of methods used in health care delivery, with the aim to identify which method is the most appropriate for treating a specific disease, but also to determine which methods are ineffective or not cost-effective, so that they can be avoided. It also identifies important knowledge gaps – areas in which further research is urgently needed. SBU organizes its work on a project basis. For each project, a multidisciplinary team, consisting of leading experts from Sweden and abroad, 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. SBU bases its work on available research findings and does not conduct original research on its own. When assessments deal with very broad subject areas (e.g. 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. SBU has been pursuing different strategies for producing and disseminating its reports. One such strategy is to develop a network of “local ambassadors” for technology assessment, who inform various target groups (e.g. doctors) at the municipal and county levels (Calltorp 1999).

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 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 health care programmes and setting priorities. Thus, the primary target groups are decision-makers (politicians, civil servants and administrators) and health care personnel. 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. When setting the guidelines, the Board members consider the three basic ethical principles that apply, by law, to all health and medical care in Sweden, i.e. the principle of human dignity, the principle of need and solidarity and the principle of cost-effectiveness. As directed by the Government, the Board must report (to the Government) on how the guidelines affect the practice of medicine (National Board of Health and Welfare 2003a). As of 2005, guidelines including recommendations for decisions on priority setting have been developed for cardiac care, venous thrombosis and asthma/chronic obstructive

pulmonary disease. The development of guidelines and recommendations on stroke, the three most common forms of cancer, and alcohol and drug abuse was initiated during 2005 and the results will be published during 2006. Also, work on dementia and depression/anxiety is under way. Since this work has only recently commenced, no studies have been concluded regarding what impact the recommendations have on the practice of medicine. However, the National Board of Health and Welfare will make regular evaluations on the impact of these recommendations continuously in the future. In addition, specialist associations play an important role in the development of medical guidelines and recommendations, and they regularly work on guidelines and recommendations in their areas of expertise.

With regard to alternative medicine in Sweden, a collaborative initiative is in place between the Department of Nursing, the Department of Public Health Sciences and the Division of International Health – namely, the Centre for Studies of Complementary Medicine (at the Karolinska Institute). The Centre is involved in research, development and education concerning traditional medicine, complementary and alternative medicine and integrative medicine. The remit of the Centre is to promote the development of evidence-based health care, into which appropriate conventional medicine practices and traditional medicine/complementary and alternative medicine are integrated.

With regard to pharmaceuticals, LFN, established in October 2002, decides what drugs should be included in the National Drug Benefit Scheme. When LFN decides if a medicine qualifies for reimbursement, it should, amongst other things, determine if the medicine is cost-effective. Board members must weigh the benefits of the medicine against the cost. The new reimbursement system is mainly product-oriented. This means that a medicine is either granted reimbursement status for the whole of its approved area of use or is not granted reimbursement at all. In exceptional cases, the Board can choose to approve reimbursement of a medicine for a limited area of use or for a particular group of patients. With regard to new products, LFN makes decisions on applications from companies who want their medicines to be eligible for reimbursement, after the MPA has approved the new product and granted permission for drug production. In 2003, LFN handled 152 applications concerning new products: 70 applications were for new original preparations, 13 were for new licensed preparations, and 69 were for new generic preparations. In 94% of the cases, the product was approved for reimbursement (Pharmaceutical Benefits Board 2004).

Another task for LFN is the transfer of medicines that currently qualify for reimbursement over to the new reimbursement system. Nearly 2000 of the medicines included in the benefit scheme are to be tested for reimbursement status in the review of the list of medicines eligible for reimbursement. This

exercise started at the end of 2003 and should take at least 5 years. The medicines are reviewed according to therapeutic groups. The first two therapeutic groups under review were medicines to treat migraine and antacids. Good health and care on equal terms are the objectives that underpin the Board's decisions. Board members consider the three basic ethical principles that apply to all health and medical care in Sweden, i.e. the principle of human dignity, the principle of need and solidarity and the principle of cost-effectiveness. In addition to basic ethical principles, the Board must consider the suitability of the medicine, i.e. it must ensure that the medicine is suitable for the intended purpose without having any unacceptable side-effects, and it must also assess its marginal utility, i.e. that there are no other more suitable medicines or methods of treatment available (Pharmaceutical Benefits Board 2002).

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 1996:1157).

3.2.2 Information systems

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 Centre for Epidemiology has its own executive board with representatives from the National Board of Health and Welfare, the National Institute of Public Health, SBU, the Federation of Swedish County Councils, the Swedish Association of Local Authorities and the research community. 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, i.e. the patient register, the medical register of birth and congenital malformations, the cancer register and the mortality cause register. There are also national quality registers that cover specific information on different treatments and their outcomes (e.g. registers on stroke, cataracts, cardiac intensive care). The registers are nationwide, cover the whole Swedish population and include data gathered over several decades. The data include a unique personal identification number for each registered

person. Various laws apply to the registers, to ensure the protection of the rights of those listed. The drop-out rates are very low (usually less than 4–5%). Patient databases located in every county council are important sources of information. These databases are based on individual identification numbers and include complete information about inpatient treatment and clinical investigations (X-rays, laboratory tests) and partial information about outpatient care.

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 the notifiable diseases specified in the Communicable Disease Act of 1998. According to this Act (1988:1472), 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.

The register on waiting times (see Section 2.4) and the Health Care Barometer are operated under the auspices of the Federation of County Councils.

The authorities involved in managing information on health-service activities and health status provide information to the local, regional and central authorities, other public authorities, researchers, the media and the public.

Comprehensive data concerning the financing of health care services in Sweden are rather poor, partly because of the division of responsibility between different levels of government, i.e. between the county councils and the municipalities (see Section 4.3). 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 Federation of Swedish County Councils, the Swedish Association of Local Authorities and Statistics Sweden.

3.2.3 Research and development

Swedish medical research occupies a prominent international position in many fields. It is characterized by strong links between basic and clinical research and by the integration of research and development into the health services, particularly at the university hospitals. Medical research is mostly financed by government funds, but the county councils also provide resources for clinical research that is closely connected with patient care. According to the Health and Medical Services Act, the county councils and the municipalities have a duty to assist in the financing and planning, as well as in the actual research within health and health care services. The local authorities also have to cooperate with each other and with universities involved in research in this area. Of the eight regional hospitals in Sweden, seven are affiliated to a medical school and also function as research and teaching hospitals. The central government finances the hospitals for those costs associated with teaching and research.

Responsibility for developing Swedish basic research at a national level lies with the Swedish Research Council (Vetenskapsrådet), which is a government agency under the Ministry of Education and Science. The Council's three main areas of activity are research funding, science communication and research policy. Research is divided into four fields: medicine, pharmacology, odontology and health care science; and the task of supporting research in these areas is assigned to the Scientific Council for Medicine. In 2002, the budget for the Scientific Council for Medicine was SKr 360 million (Swedish Research Council 2002). The Scientific Council for Medicine provides support in 28 areas of research. Microbiology, immunology and infectious diseases, and disorders of the nervous system receive the most funding (Swedish Research Council 2003).

Research funding has become more dependent on nongovernmental contributions during the last 10 years. Nongovernmental funds for research increased steadily, whereas government funds fell during the period 1994/1995–2001 (Swedish Research Council 2003).

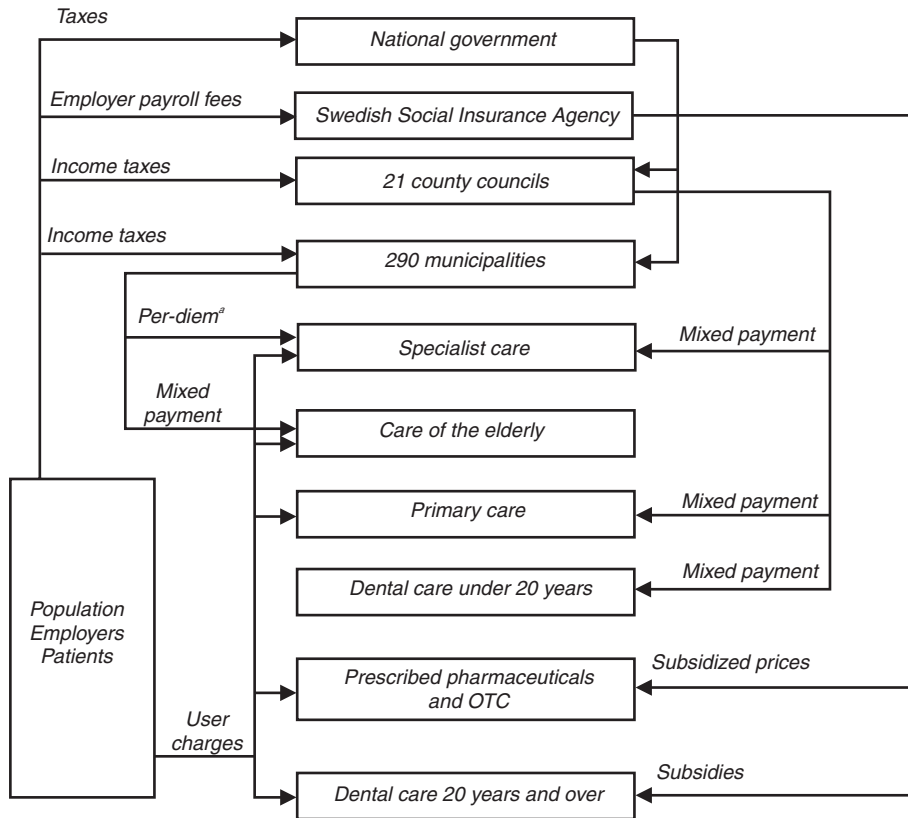
4. Financing of health care

The funding of the Swedish health care system is primarily through taxes. Both the county councils and the municipalities have the right to levy proportional income taxes on their respective populations. The financing of health care services by local taxes is supplemented by the Government and by user charges. Subsidies for dental care and prescription drugs are paid for by national social insurance, and the Swedish Social Insurance Agency generates revenues primarily through employer payroll fees (see Fig. 4.1). 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. This is because most county council activities are financed through county tax revenues, and because the county councils are also responsible for other activities, e.g. education and cultural activities. In 2003, the total cost for the county councils was SKr 149 billion, of which approximately 92% was directly connected with health and dental care (Federation of Swedish County Councils 2004b). The corresponding figures for the municipalities in the same year was SKr 389 billion, of which approximately 30% was directly connected with care for the elderly and the disabled (Swedish Association of Local Authorities 2004).

4.1 Revenue mobilization

County council revenue mobilization is heavily dependent on tax income. In 2003, 72% of the county council revenues originated from local taxes. The remainder consisted of: state grants, 18% (subsidies and general state grants), user charges, 3% and other sources, 7% (see Fig. 4.2). Note that the figures describe total county council revenues and not total expenditures on health. In

Fig. 4.1 Financial flowchart of the health care system

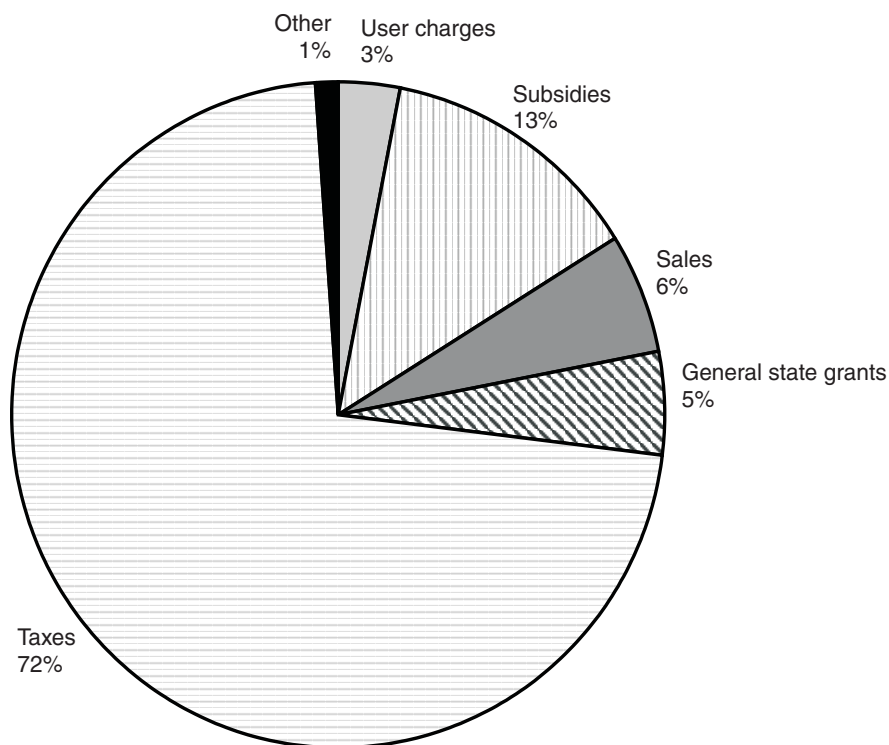


^a Refers to funding by municipalities of so-called bed-blockers in hospitals

2003, 92% of the total county council expenditures were directly connected to health and dental care services. The municipalities also generate the major part of their revenues through local taxes (69% in 2003). Expenditures on care for the elderly and disabled constituted 30% of the municipalities' total expenditures in the same year (Federation of Swedish County Councils 2004b).

The main source of finance has been quite stable over time. Taxes, as a proportion of total county council revenue, increased from 62.3% in 1980 to 72.2% in 2003 (Federation of Swedish County Councils 2004b). During the last 5 years, user fees as a proportion of total revenues decreased by 0.6%, whereas local taxes increased by 3.7% (see Table 4.1). With the exception of taxes, comparison of sources of revenue with periods before 1998 is not possible, since the reporting of data has not been consistent.

Fig. 4.2 Sources of revenue as percentages of total county council revenue, 2003



Source: Federation of Swedish County Councils (2004b).

Table 4.1 Sources of revenue as percentages of total county council revenue, 1998–2003

Source of revenue	1998	1999	2000	2001	2002	2003
Taxes	68.5	68.3	69	70.4	70.8	72.2
Subsidies	13.0	13.6	14.0	13.5	13.4	12.8
Sales and other revenues	5.7	4.5	5.0	6.4	6.6	5.9
General state grants	6.8	7.6	7.0	6.3	6.0	5.4
User charges and other charges	3.4	3.4	3.0	2.8	2.7	2.8
Other	2.6	2.6	2.0	0.7	0.6	0.9
Total	100	100	100	100	100	100

Source: Federation of Swedish County Councils (2004b).

4.1.1 Main source of finance

The provision of health care services is decentralized to the local level. Both the county councils and the municipalities levy proportional income taxes on their respective residents. In 2003, 72.2% of the county council revenues and 69.4% of the municipal revenues originated from taxes (Federation of Swedish County Councils 2004b). It is the local authorities that decide the levels of the local taxes. The average county tax rate was 10.76% in 2004, and the average municipal tax rate was 20.79% in the same year (Federation of Swedish County Councils 2004a). 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. In 2002, approximately 82% of the health care services (excluding dental care) and 65% of the dental care services were financed through taxes (Federation of Swedish County Councils 2004a). During the 1990s, the Government limited the level of income taxes levied by the local authorities on two occasions: once during the period 1990–1994 (through a ban on municipalities to increase taxation) and once in 1997–2000 (through sanctions that cut the state grants for those municipalities or county councils that imposed increased taxation) (National Board of Health and Welfare 2002c).

County councils and municipalities also receive subsidies and state grants, which are financed through national income taxes and indirect taxes. The major part of the subsidies takes the form of reimbursements for pharmaceuticals listed in the Drug Benefit Scheme (Federation of Swedish County Councils 2004a). State grants are partly based on a formula that 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. This formula for re-allocating resources across local government bodies was adopted in 1996. It is based on individual level data, and uses demographic and socioeconomic variables as proxy measures of health care need (Diderichsen et al. 1997). In practice, the new formula has meant that two county councils (Stockholm and Uppsala) are net contributors and all the other 19 county councils net recipients. For the 290 municipalities, a similar division between a small number of “losers” and a larger number of “winners” can be identified. The new formula created increased tensions, firstly between the “losers” and the national government, and secondly across local government bodies. To facilitate adaptation to these negative effects, the formula is being implemented over an 8-year period. Nonetheless, tensions have grown over the years, and political debates about the compensation scheme and its effects have become a problem for the Government.

4.1.2 Second most important source of finance

The social insurance system, managed by the Swedish Social Insurance Agency, provides financial security in case of sickness and disability. Insurance is mandatory and covers part of an individual's income losses due to illness and use of health care services. The insurance also covers individuals' expenditures for health care and prescribed drugs according to high-cost protection schemes (see Section 4.1.3).

The majority of national health insurance is financed by employers' contributions; the rest is financed by specific transfer payments from the central government. Both private and public employers pay a contribution per employee to the health insurance system. In 2004, this constituted 11% of an employee's gross wage (Federation of Swedish County Councils 2004a). It should be noted that there is interdependence between the two insurance functions (i.e. that for health care costs and that for income losses). Inadequate or delayed provision of medical care might cause excessive expenditure on income compensation and production losses.

Compensation for loss of income is an important item covered by the insurance. Employers pay income compensation from the second day until the fourteenth day of sickness, after which point the national health insurance compensates the person. The sick person receives a compensation of 80% of his/her income up to a monthly salary of SKr 24 500 (approximately €2700). If a person earns more than that, the compensation is still 80% of SKr 24 500. The insurance also covers drug costs (through the Drug Benefit Scheme) and health care and dental care costs (through the high-cost protection and exemption scheme on out-of-pocket payments) and subsidizes dental care.

4.1.3 Out-of-pocket payments

There are direct, small fees for medical attention payable by patients; these fees are in the form of flat-rate payments. In 2003, the county councils received SKr 5130 million in patients' fees and other fees (including those for dental care), which accounted for 2.8% of the county councils' total revenues (Federation of Swedish County Councils 2004b). User charges for prescription drugs and dental care and high-cost protection schemes for different services are regulated by the Government, but county councils have been able to determine their own user charges for hospital and primary care within the national framework since 1991. This practice has resulted in increased and differentiated patients' fees (Burstrom 2004). The parliament has set ceilings on the total amount that any citizen must pay in any 12-month period. In 2004, the fee for consulting a physician in primary health care varied from SKr 100

to SKr 150 (approximately €11–17) among the county councils. In the same year, the fee for consulting a specialist at a hospital varied between SKr 200 and SKr 300. For inpatient care, normally a fee of SKr 80 per day is charged, but reductions are possible for pensioners and those in low-income groups (Federation of Swedish County Councils 2004a). In almost all county councils, children and young people (under 20 years of age) are exempted from patient fees. Only a few county councils have small user fees for people under the age of 20 (see Table 4.2).

The Government's ceiling for out-of-pocket payments means that an individual's total charges on health care for a period of 12 months, i.e. for visits to physicians, district nurses, physiotherapists, etc., cannot exceed SKr 900 (€100), not including inpatient care. After this cost ceiling has been reached, the patient pays no further charges for the remainder of the 12-month period, which is calculated from the date of the patient's first visit to a physician. The exemption scheme is included in national health insurance, financed by the Swedish Social Insurance Board and administered by the county councils.

At primary care clinics, vaccinations, health examinations and consultations, and certain types of treatment are provided 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.

The ceiling for individual co-payments for prescribed drugs is separated from the other health care services and is administered by the National Corporation of Swedish Pharmacies. Co-payments for prescribed drugs are uniform throughout the country and are fully determined by the Government. The patient has to pay the full cost for prescribed drugs, up to SKr 900, after which level the subsidy gradually increases up to a 100% subsidy. Within a 12-month period, the maximum co-payment is SKr 1800 (€200) for prescribed drugs. The corresponding limit for patients' fees for technical devices is SKr 2000. In 2003, the total value of prescribed (and dispersed) drugs amounted to SKr 22 750 million. Patients' out-of-pocket payments for prescribed drugs constituted 24% of those costs. In addition to this, Swedish consumers paid SKr 2.7 billion for over-the-counter drugs and other health-related items from pharmacies (Swedish Association of the Pharmaceutical Industry 2004).

Dental care is provided free of charge to all children and adolescents (up to the age of 20 years). Adults receive a financial subsidy from the national dental insurance system for basic dental care. This subsidy is paid directly to the provider. Previously, the reimbursement was based on a percentage of the national tariff, but now the subsidies are fixed according to the type of treatment. If dental services are part of the treatment for some disease or if the patient is elderly and/or disabled and living in special housing, the cost ceiling for other

health care services will apply, i.e. a maximum of SKr 900 (€100) in user charges for all health care and dental services during a 12-month period. For certain more extensive dental procedures, there is a special high-cost protection system (implemented in July 2002) for those aged 65 or over, whereby a patient pays a maximum of SKr 7700 (€850) for a 12-month period of treatment.

In 2002, a new fee system was introduced for care of the elderly and the disabled. The purpose of the new system was to ensure that all individuals have a certain amount of money to cover living expenses (a reserve sum) once all fees are paid. The reserve sum is SKr 4087 for single people and SKr 3424 for married couples or partners living together. Even more important was the introduction of a maximum fee (“maxtaxa”) for home-help services, etc., which amounted to SKr 1572 per month in 2004 (see Table 4.2).

4.1.4 Voluntary health insurance

Private medical insurance is very limited in Sweden. In 2003, about 200 000 inhabitants (2.3% of the population) had supplementary insurance. About 62% of those with private medical insurance had an individual insurance policy (Swedish Insurance Federation 2004). However, the market for voluntary health insurance is growing. One of the reasons behind the growing market for voluntary health insurance is the long waiting lists for elective treatment under the county councils. The main benefit of having supplementary insurance is that it allows quick access to a specialist in ambulatory care when necessary. Another benefit might be the possibility of jumping waiting lists for elective treatment. However, voluntary health insurance is a small sector in Sweden in comparison with other EU countries. It should be noted that the number of surgical operations that are privately financed is quite low. Even in the few private hospitals, an overwhelming proportion of the activities are financed by public money, i.e. they are purchased and contracted by county councils.

4.2 Allocation to purchasers

Taxes constitute the primary source of county council and municipality revenues. The financing of health care services is also supplemented by national government grants and by user charges (see Fig. 4.1). Central government grants are partly based on a formula that re-allocates resources across municipalities and county councils with the aim of giving different local governmental bodies the opportunity to maintain similar standards, independent of need, income and geography. The resource-allocation formula is based on an assessment of need,

Table 4.2 Overview of user charges and high-cost protection schemes in 2004

	Health care	Prescription drugs	Dental care	Care of the elderly and the disabled
User charges	Fixed user charges for different types of outpatient visit. Each county council can determine its own fee schedule. In 2004, the fee for consulting a primary care physician varies across different county councils, and ranges from €11 to €17 (SKr 100–150). The fees for consulting a specialist at a hospital vary between €22 and €33 (SKr 200–300). The maximum user charge is €9 (SKr 80) per day for inpatient care.	User charges within a 12-month period decrease with expenditure, as follows: SKr 0–900 (€0–100) →100% SKr 901–1700 (€100–189)→50% SKr 1701–3300 (€189–367)→25% SKr 3301–4300 (€367–478) →10% Above SKr 4300 (€478) → fully subsidized.	Fixed subsidies apply, depending on the type of service. Patients pay the difference between the subsidy and the actual price of services.	Depending on the level of service and care, together with the number of hours of assistance accorded per month, each municipality sets its own fee schedule in accordance with nationally determined reserve sums and maximum fees.
High-cost protection	Maximum of €100 (SKr 900) user charges for outpatient care in each 12-month period.	Maximum of €200 (SKr 1800) user charges for each 12-month period.	For the elderly and the disabled in municipal care, a total maximum user charge of €100 (SKr 900) applies for all health care and dental services used during a 12-month period. A maximum of €850 (SKr 7700) per 12-month period of dental treatment applies for patients above 65 years of age.	In 2004, the maximum fee for home-help services, care in sheltered accommodation, day-care services and municipal health care services is €175 (SKr 1572) per month. The monthly reserve sum is €490 (SKr 4408) for single people and €410 (SKr 3684) per person for married couples or partners living together.
Exemptions	Patients below 20 years of age (with some local exceptions) are exempted from user charges.	Insulin for patients with diabetes is free of charge.	County councils provide free dental care for patients below 20 years of age.	
Central/local decision-making	Central government determines the high-cost protection scheme for outpatient care and the maximum user charges for inpatient care. County councils determine payment levels within the national framework.	Central government determines subsidies and the high-cost protection scheme.	Central government determines subsidies and high-cost protection schemes for selected groups of patients.	Municipalities determine the charges within the national framework.

assuming that the different needs for health care of the various groups in the population are matched by their varying uses of health services. The formula takes into account differences in average health care costs per individual in the general population divided by sex, age, civil status, occupation, income, housing and groups with a high consumption of health care resources (SOU 1996:163). Since 1998, the central government has allocated drug budgets to the county councils. Subsidies for dental care and prescription drugs are paid for by national social insurance.

Allocation formulas aimed at taking account of different conditions within county councils have been in place since the late 1980s. Usually there are two or more districts within every county council, each of which has responsibility for hospital services and primary care over a particular geographical area. In the past, resource allocation from county council level to these districts was based on historical expenditures, but this resulted in large variations in the cost of services and available resources. Inspired by national investigations, several county councils started to develop their own population-based models for resource allocation to districts. By the late 1980s, about half of them had (using such models) documented differences with respect to the existing patterns of resource allocation (Anell 1990). In most cases, the population-based models created “winners” and “losers”, and implementation has been slow.

The county councils make most of the resource-allocation decisions regarding health services within the county. Designated state grants are small. 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. According to the Health and Medical Services Act, the central government is responsible for deciding how the county councils are grouped into health care regions. The Act also states that county councils should collaborate within these regions with respect to highly specialized health care.

4.3 Purchasing and purchaser–provider relationships

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 health care facilities are owned and operated by the county councils. Physicians and other staff categories are mainly salaried employees.

There are few private hospitals, and the number of private physicians and health centres varies widely between the county councils. In some urban county councils, up to 60% of primary care physicians may be private, whereas in other county councils only a few private practitioners 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 3.1.2).

In the early 1990s, most county councils introduced some form of purchaser-provider 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 (using methods referred to as the Dala Model, the Stockholm Model and the Bohus Model) that included most issues discussed in the 1980s, i.e. resource allocation according to the needs of the residents, per-case payment schemes, total cost liability for departments, and interdependent transfer pricing systems. Furthermore, the roles of politicians and professionals were redefined: the politicians were required to act as representatives of the patients (through purchasing organizations), and health professionals were made responsible for the provision of the 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, have been transformed into county-council-owned limited companies. In some county councils (Stockholm, Skåne) some of these companies were transformed back to county council boards again after the 2002 General Election.

By 1994, 14 out of (at the time) 26 county councils had introduced purchasing-provider models. The purchasing organizations vary among and, in some cases, within the county councils. Some county councils have introduced one large central county council purchasing organization, while others have introduced purchasing organizations at district level. Two county councils, Dalarna and Bohus, have introduced local purchasing organizations that follow local municipal boundaries. The choice of purchasing organization seems to be influenced by the traditions of organizing health care activities within the county council, not least the degree of decentralization.

Although purchaser-provider models created incentives for more efficient management, there were concerns that market-based mechanisms would damage social equity and, because of high transaction costs, save little money. In the second half of the 1990s, the word “cooperation”, instead of “competition” started to be used. As a result of increased dialogue between purchasers and providers, there emerged a tendency towards a shift from specifying the number of specific medical interventions to defining broader health programmes that

included more than one provider. County councils cooperated to improve the distribution of workload between hospitals. The administration of some hospitals was extended over several nearby hospitals to increase efficiency. Moreover, some types of activity (e.g. laboratory work) have been combined. The organizational structure of hospitals varies among counties, depending on their size and the political committees in charge. However, even if differences exist, the structure basically consists of a hierarchical organization with traditional departments. The most common structure involves a hospital director, an advisory physician (who has no managerial responsibilities) reporting to the director, and the departments, each of which has a head of department and two levels of physicians. The departments match the medical specialties, with subdepartments for subspecialties.

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 diagnosis-related groups) and complemented with price or volume ceilings and quality components. Prices are determined by historical costs and negotiations between purchasers and providers. The use of diagnosis-related groups 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.

4.4 Payment mechanisms

4.4.1 Paying health care personnel

As most providers in Swedish health care are publicly owned, physicians, dentists, pharmacists and other professional groups are mainly salaried employees. Most physicians are members of the Central Organization of Swedish Academics, a union which represents them in salary negotiations. A full week's work is 40 hours. In 2003, physicians employed by the county councils earned SKr 48 100 (€5300) per month on average. This includes compensation for work done and for being on call during non-regular working hours. The corresponding figure for nurses was SKr 23 000 (€2600) in the same period. Dentists made, on average, SKr 35 300 (€3900) per month. As a comparison, the average monthly salary in 2003 for all employees in the county council sector was SKr 24 100 (€2700) (Statistics Sweden 2004e).

Private health care providers and dental clinics use a mixture of salaries, capitation and fee-for-service payments for professional staff. The Swedish Social Insurance Agency reimburses private dentists and physicians.

4.4.2 Paying for health services

Resource-allocation principles vary among the county councils. Most county councils have decentralized a great deal of the financial responsibility to health care districts, through global budgets. Activities such as psychiatry, geriatrics and emergency services are normally financed through global budgets. In about half of the county councils, payments to both hospitals and primary care centres are based on global budgets (Federation of Swedish County Councils 2003a). Among the others, a smaller group of about five county councils continue to develop per-case payment, with expenditure ceilings for some services (primarily hospitals) and capitation models for primary care. In another group of a similar size, payment for primary care is moving in the direction of capitation, whereas global budgets are used for all other services. Capitation became common in 1993–1994 when the law relating to family doctors was introduced (see Section 7.1). 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 full costs.

With respect to the allocation of resources, one important issue in the 1990s was that patients were given increased options for choosing among health care providers. As patients' freedom to select health care providers increased substantially in the 1990s, the allocation of resources has been affected, since the payment usually follows the patients' choices. Districts or county councils have to reimburse the provider chosen by the patient. Retrospective patient-related fee-for-service reimbursement systems are common for individuals receiving highly specialized regional hospital health services where the patient does not belong to the county council in which the regional hospital is situated. However, the effect on allocation of resources of the patient's increased freedom to choose a provider has been marginal since, in reality, most patients choose not to seek care outside their "own" county council.

County councils are financially responsible for ambulatory care provided by either the county council or private practitioners connected to a regional insurance office. General state grants are disbursed to the county councils for funding these activities. The county councils pay private practitioners who have an agreement with the county council. The private providers have the right to charge patient fees according to the fee level determined by the county council. The payments to private providers may also be based on other kinds of contracts.

4.5 Health care expenditure

Data concerning health care expenditure in Sweden are rather poor, partly because of the division of responsibility across different levels of government. In addition, the county councils and, in particular, the municipalities have responsibilities other than health care. About 90% of county council expenditure and 30% of municipal expenditure are related to health care and the care of the elderly and disabled, respectively. Until 1999, the municipalities did not separate expenditures for health care for the elderly, and this has posed problems when total health care expenditures in Sweden are compared with those of other countries within the Organisation for Economic Co-operation and Development.

During the 1970s, the health care sector expanded in all countries in Western Europe, with investments in infrastructure and new technologies. In Sweden, this growth led to demands for control of health care expenditure. During the 1980s, total expenditure on health care as a share of GDP was reduced from 9.1% in 1980 to 8.4% in 1990. Furthermore, the economic crisis during the first half of the 1990s had effects on the development of resources in health care in Sweden. Expressed as fixed prices, health care expenditure remained practically unchanged during these years. Between 1990 and 1995, total expenditure on health, expressed as a percentage of GDP, fell from 8.4% to 8.1%, as can be seen in Table 4.3 and Fig. 4.4. Between 1997 and 2002, however, health care expenditure increased faster than GDP. During this period, health care as a proportion of GDP rose from 8.2% to 9.2%. Furthermore, as Table 4.3 shows, the public share of total health care expenditure has continuously decreased during the past two decades. This is mainly due to increasing cost-sharing, as health care with a high degree of patient co-payment (e.g. drugs, dental care) has increased, while health care with a low degree of patient co-payment (e.g. inpatient care) has decreased.

Fig. 4.3 shows health expenditure from public sources as a percentage of total health expenditure, for the WHO European Region; Sweden's share in 2002 was 85%. The corresponding figures for Iceland, Denmark and Finland were 84%, 83% and 76%, respectively. Norway's share in 2003 was 86%.

At the start of the 1990s, Sweden's total health care expenditure as a proportion of GDP was above the EU average. As can be seen in Fig. 4.4, the gap narrowed during the 1990s; this was a result of both falling health expenditure as a proportion of the GDP in Sweden, and increasing health expenditure in other European countries. Between the years 2000 and 2002, health care expenditure as a proportion of GDP increased from 8.4% to 9.2%, and in 2002 Sweden was slightly above the EU average (see Table 4.3 and Fig. 4.4.).

Table 4.3 Trends in health care expenditure for selected years (1980–2002)

Expenditure	1980	1985	1990	1995	2000	2002
Total health expenditure (per capita, US\$ purchasing power parity)	924	1247	1566	1733	2243	2517
Total health expenditure (% of GDP)	9.1	8.7	8.4	8.1	8.4	9.2
Public expenditure on health (% of total expenditure on health)	92.5	90.4	89.9	86.6	84.9	85.3
Private expenditure on health (% of total expenditure on health)	7.5	8.6	10.1	13.4	15.1	14.7
	1980–1985	1985–1990	1990–1995	1995–2002		
Mean annual real growth in total expenditure on health	1.7	1.2	0.3	4.3		
Mean annual real growth in GDP ^a	1.8	2.4	0.7	2.8		

Source: Organisation for Economic Co-operation and Development (2004).

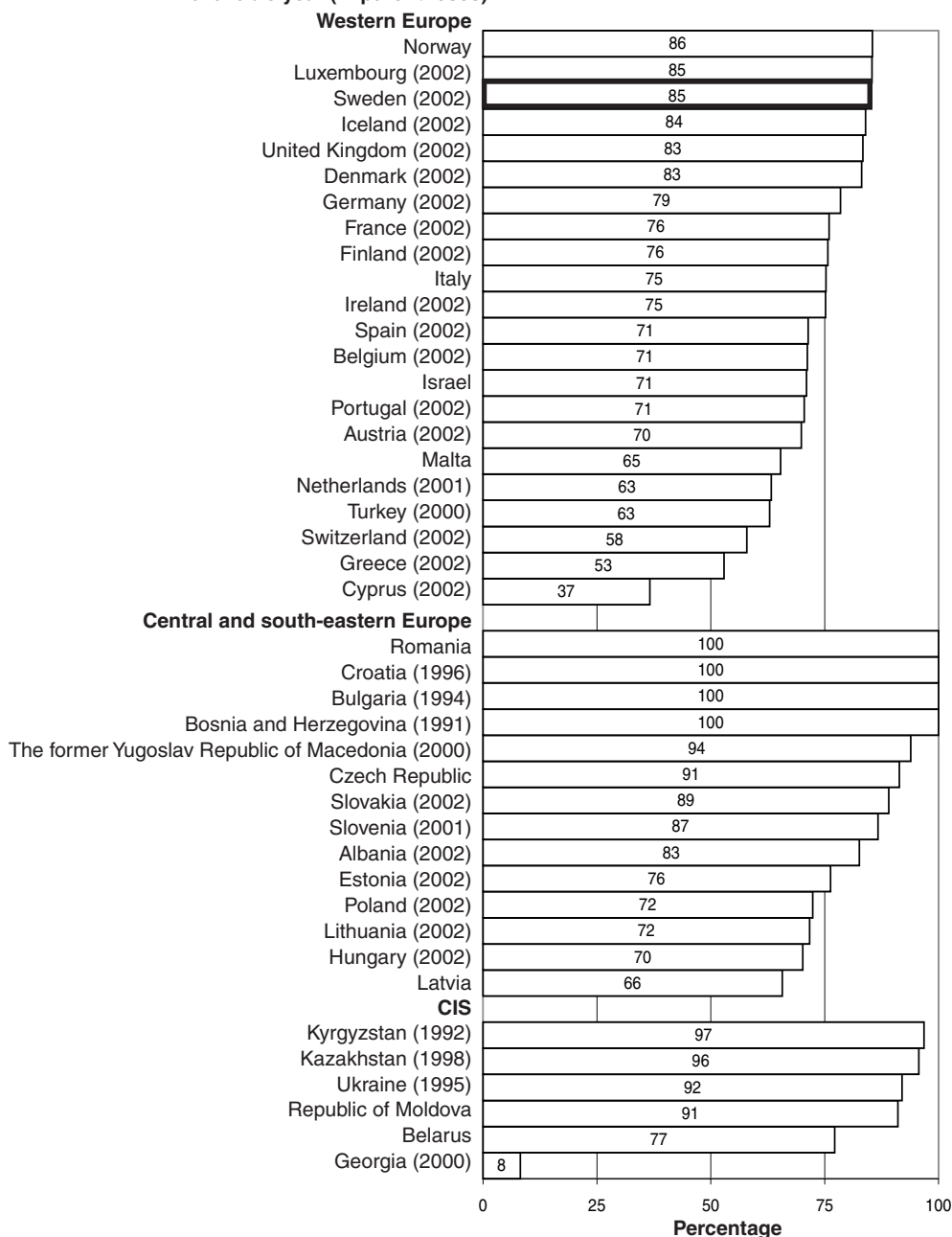
^a Mean of annual growth rates (in SKr) at 1995 GDP prices.

Health care expenditure as a share of GDP was 9.2% in Sweden in 2002, which was lower than in Iceland (9.9%), but higher than in Denmark (8.8%) and Finland (7.3%) (see Fig. 4.3). The corresponding figure for Norway in 2003 was 9.1%.

Sweden's health care expenditure (US\$ purchasing power parity) per capita was 2517 in 2002, which was slightly higher than the EU average (2131), lower than in Denmark (2580), but higher than in Finland (1943) (see Fig. 4.5).

The structure of health care expenditure is illustrated in Table 4.4. As shown in the Table, publicly financed health care has decreased over the last 20 years, as opposed to patient co-payments (which have increased). Furthermore, the pace of investment has declined since 1980. Possible explanations for this are that the expansion phase of the 1970s led to a mature health care infrastructure and that cost containment became an important issue in the 1980s. Inpatient care within certain areas fell quite dramatically during the first half of the 1990s, partly because of the ÄDEL Reform. Patients who were considered, by the hospital doctor, to be fully medically treated were transferred to nursing homes and home-based care, which are the responsibility of the municipalities.

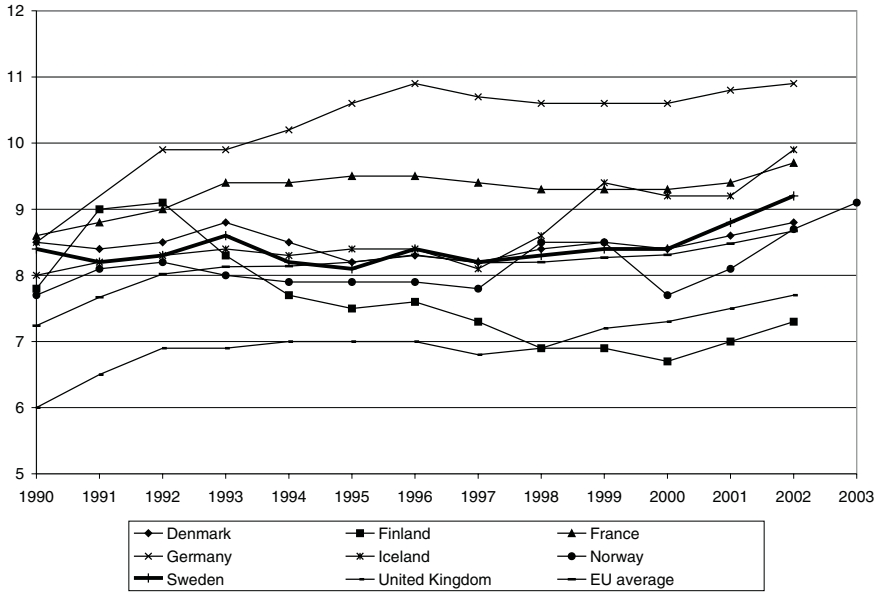
Fig. 4.3 Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 2003 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2005.

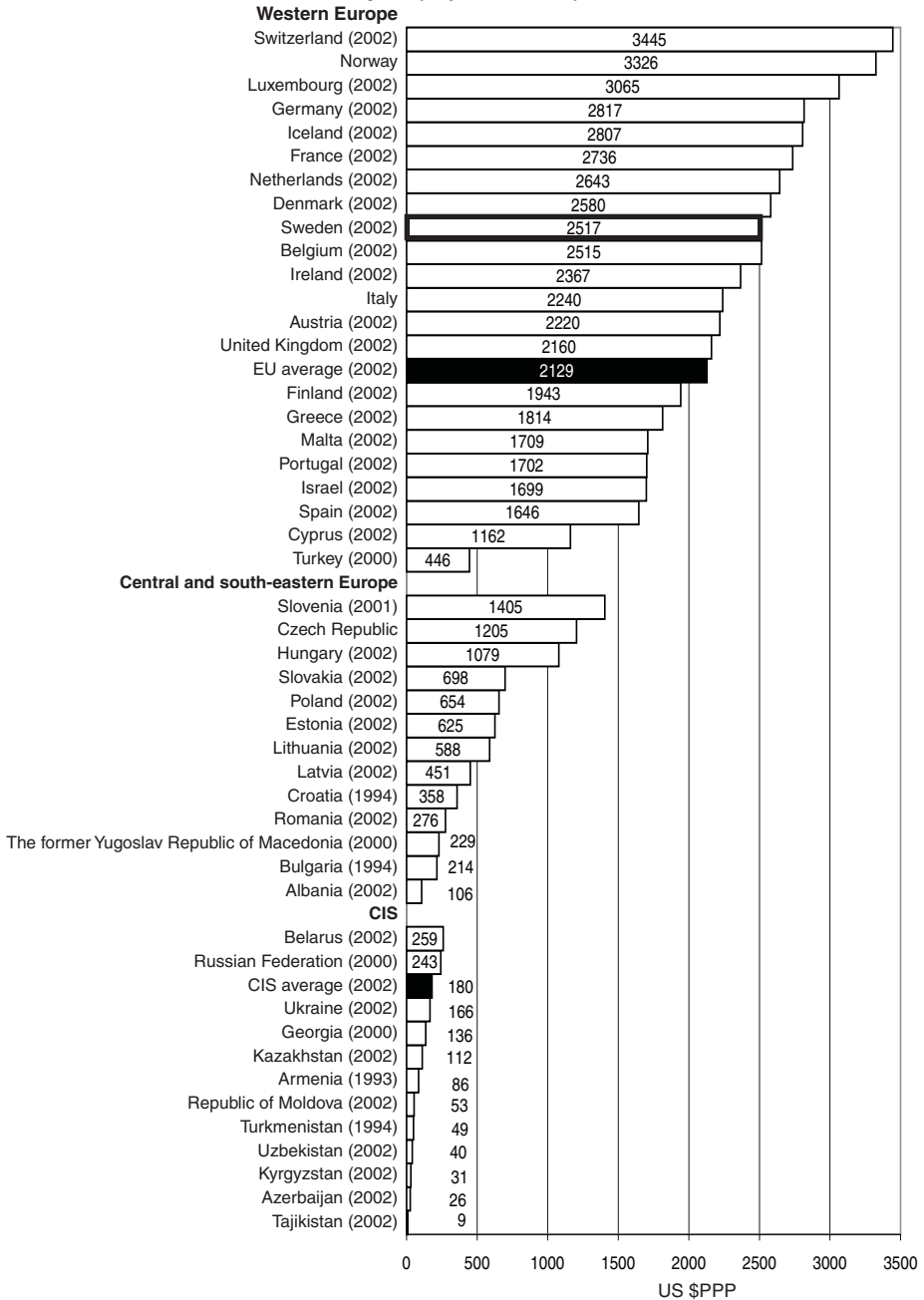
Note: CIS: Commonwealth of independent states; countries without data not included.

Fig. 4.4 Trends in health care expenditure as a proportion of GDP (%) in Sweden and some other countries, 1990–2002



Source: WHO Regional Office for Europe health for all database, June 2005.

Fig. 4.5 Health care expenditure in US \$PPP per capita in the WHO European Region, 2003 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2005.

Note: CIS: Commonwealth of independent states; EU: European Union; countries without data not included.

Table 4.4 Health care expenditure by category, as a percentage of total expenditure on health, 1980–2002

	1980	1985	1990	1995	2000	2001	2002
Public expenditure on health (% of total health expenditure)	92.5	90.4	89.9	86.6	84.9	84.9	85.3
Total investment in medical facilities (% of total health expenditure)	6.7	6.8	4.3	4.7	4.8	4.4	4.6
Total expenditure on medical services (% of total health expenditure)	–	–	82.2 ^a	80.1	78.6	79.5	79.7
Total expenditure on inpatient care (% of total health expenditure)	–	–	49.0 ^a	49.0	46.3	31.6	31.2
Total expenditure on outpatient care (% of total health expenditure)	–	–	25.3 ^a	22.9	23.8	47.1	47.7
Public expenditure on inpatient care (% of public expenditure on health)	74.0	59.1	55.5	55.7	54.0	36.7	36.0
Public expenditure on outpatient care (% of public expenditure on health)	9.0	18.0	22.8	18.9	20.1	47.3	47.9
Public expenditure on investments in medical facilities (% of public expenditure on health)	7.3	7.2	4.3	4.7	4.1	3.9	4.0

Source: Organisation for Economic Co-operation and Development (2004).

^a Data for 1993.

5. Physical and human resources

5.1 Physical resources

Hospitals in Sweden are divided into district county hospitals, central county hospitals and regional hospitals, depending on their size and degree of specialization (see Section 6.4).

Patients with complex and/or rare diseases and injuries need highly specialized care and are attended to at regional hospitals. The county councils cooperate within six medical care regions to provide care for those in need of highly specialized treatment. There are one or two regional hospitals per region, and they serve a population of between one and two million inhabitants. By organizing highly specialized care in this way, the county councils, through cooperative planning, are able to use the available resources in the most efficient way. The regional medical care system is responsible for patients whose medical problems require the collaboration of a large number of specialists and sophisticated diagnostic or treatment facilities. Sweden's six medical care regions have a total of eight regional hospitals, and the average number of hospital beds was 10 251 in 2001, which is relatively large compared with the same type of hospital in other countries (National Board of Health and Welfare 2002d).

5.1.1 Infrastructure and capital investment

Sweden is considered to have a relatively large proportion of health care resources allocated to the provision of care and treatment at hospitals. However, since 1992, the number of hospital beds has decreased substantially. Between 1993 and 2003, the total number of hospital beds was reduced by more than 40%. In 1993, the total number of beds per 1000 people was 5.5; however, by

2003, the number of beds had decreased to 3.0 beds per 1000 people (Federation of Swedish County Councils 2004b). This reduction is partly due to a decline in the number of non-acute beds (e.g. for long-term patients, psychiatric patients), in large part as a result of the ÄDEL Reform, which transferred responsibility for 31 000 patients in county council long-term-care nursing homes to the municipalities, starting in 1992. Thus, the numbers in Table 5.1 refer only to the geriatric care provided by the county councils and not to the long-term care provided by the municipalities. In addition, over the past 10 years, considerable changes have been made in the area of psychiatric care. To a great extent, people with mental illnesses have left institutional care in order to live in the community.

The reduction in the number of beds in Sweden has resulted in a reduction in the average length of stay. In 1993, the average length of stay was 7.9 days; by 2003, it had dropped to 6.0 days. At the same time as reductions have been made in inpatient care, outpatient care has increased. The introduction of day surgery, for example, demonstrates the changes that are taking place. The decreasing number of beds together with the reduction in the average length of stay have led to an increase in the hospitalization rate and the rate of patient turnover (see Section 6.3 for information about the number of outpatient contacts).

Table 5.1 Emergency care hospital beds, psychiatric hospital beds and long-term care beds per 100 000 people, 1980–2002

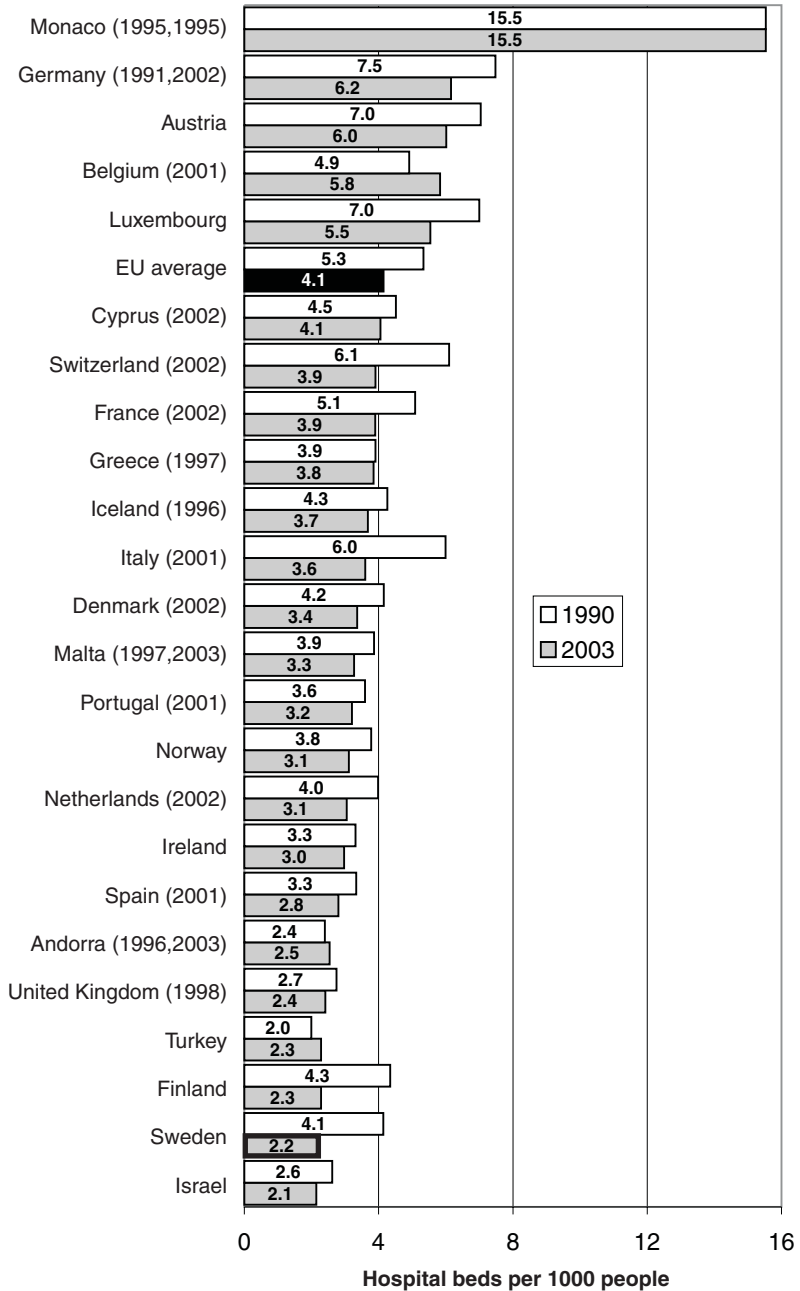
	1980	1990	1996	1997	1998	1999	2000	2001	2002
Acute-care hospital beds	42 285	35 403	24 973	23 801	22 751	22 485	21,725	20 857	20 378
per 1000 people	5.1	4.1	2.8	2.7	2.6	2.5	2.4	2.3	2.3
Psychiatric hospital beds	26 962	14 533	7 276	6 267	5 872	5 786	5 565	5 218 ^a	4 894 ^a
per 1000 people	3.2	1.7	0.8	0.7	0.7	0.7	0.6	0.6 ^a	0.5 ^a
Long-term care beds	44 859	45 965	4 699	3 740	3 627	3 502	3,189 ^a	2 774 ^a	2 432 ^a
per 1000 people	5.4	5.4	0.5	0.4	0.4	0.4	0.4 ^a	0.3 ^a	0.3 ^a

Source: World Health Organization (2004a).

^a Data from the Federation of Swedish County Councils (2004b).

In Fig. 5.1 and Fig. 5.2, current inpatient bed utilization and performance in acute hospitals in Sweden are compared with those in other countries in the WHO European Region. Fig. 5.1 shows the number of hospital beds in acute hospitals per 1000 people in western Europe in 1990 and 2002. As illustrated, the number of acute hospital beds per 1000 inhabitants in Sweden is low compared with other countries in western Europe. The number of such beds has dropped from 4.1 to 2.3 per 1000 inhabitants during the same period in Sweden. With a

Fig. 5.1 Hospital beds in acute hospitals per 1000 people in western Europe, 1990 and 2003 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2005.

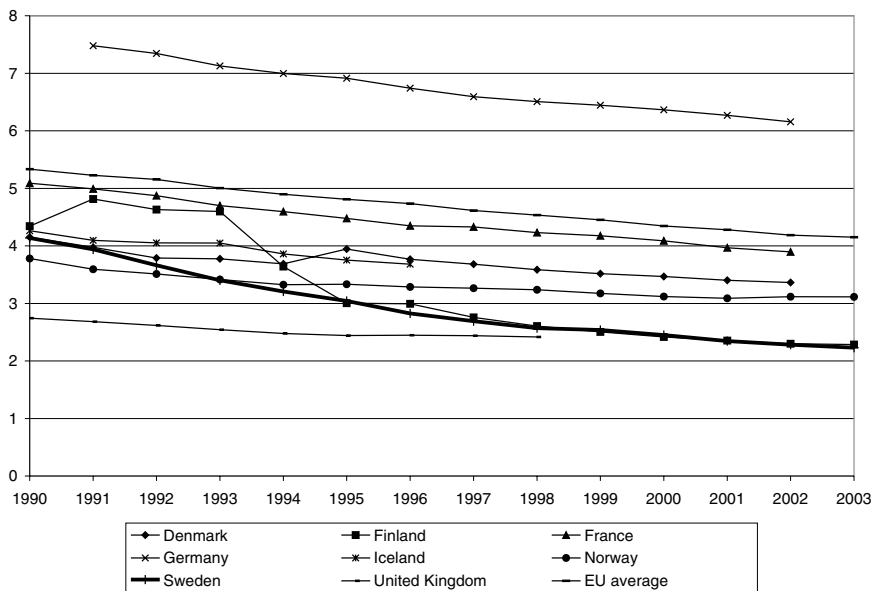
Note: EU: European Union; countries without data not included.

few exceptions (Belgium, Andorra and Turkey), the trend in all countries has been towards decreasing numbers of acute-care beds.

The number of acute-care hospital beds per 1000 people in Sweden is one of the lowest in Europe (see Fig. 5.1). In 2003, it was 2.2 per 1000 people, which is similar to the numbers for Finland (2.2 in 2003) and the United Kingdom (2.4 in 2002).

In Fig. 5.2, the trend in the number of acute hospital beds in Sweden is compared with the trend in neighbouring countries and with the EU average. It is clear that there was a continuous decline in the number of acute beds in Sweden throughout the 1990s.

Fig. 5.2 Beds in acute hospitals per 1000 people in Sweden and selected other countries, 1990–2003



Source: WHO Regional Office for Europe health for all database, June 2005.

Regarding capital investment, there are recurrent and capital budgets for health care at different organizational levels, i.e. county council level, district level and clinic level. The actual decisions about 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 bigger 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.

5.1.2 Information technology

Access to, and use of computers and the Internet is high among the Swedish population. Almost 80% of the population have access to the Internet (at home and at work), and more than half of the population use the Internet on a daily basis. More than 80% have a computer at home and 70% can access the Internet from home. Among companies, 98% of those employing at least 10 people had access to the Internet in 2001. It is primarily the elderly who do not use the Internet (Swedish Agency for Public Management 2003).

All county councils have web pages where information (publicly and privately provided) about health care services can be found. These pages contain information about where to seek care in the event of ill health or an injury, and about the different hospitals and health care facilities that are available. In addition, all county councils have 24-hour telephone “hot lines” so that people can access information about whether to seek treatment and where best to seek appropriate care.

Several different information technology systems operate in the Swedish health care sector. 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 and, under some county councils, efforts are made towards harmonizing patients’ records across all hospitals in the county. It is up to every hospital to select and procure its own preferred system, as there is no national strategy covering this area.

Ongoing projects, at both national level and county council level, aim to integrate (and make compatible) the various information systems used, with the purpose of increasing the security and effectiveness within the systems.

5.1.3 Medical equipment, devices and aids

The Public Procurement Act of 1992 applies to matters relating to hospitals’ acquisition of medical equipment. The Act regulates almost all public procurement. Contracting entities – such as local government agencies, county councils, government agencies and also certain publicly owned companies, etc. – must comply with the Act when they purchase or lease equipment and services.

Hospitals in Sweden are divided into district county hospitals, central county hospitals and regional hospitals, depending on their size and degree of specialization. Highly specialized care requiring the collaboration of a large number of specialists and also sophisticated diagnostic or treatment facilities is provided at the regional hospitals. The county councils cooperate in six medical care regions with regard to the provision of highly specialized care. Through

cooperative planning, the county councils are able to use the available resources in the most efficient way (see Section 6.4).

Table 5.2 shows the number of computed tomography scans (CTs) and magnetic resonance imaging scans (MRIs) performed per million inhabitants in Sweden in 1999 (the latest available year). Sweden generally presents high values for use of these procedures compared to the other Nordic countries as well as Germany, Spain, France and the United Kingdom.

5.1.4 Pharmaceuticals

Table 5.2 Medical technology in Sweden, 1999

Procedure	Scans performed per million inhabitants
Computed tomography	14.2
Magnetic resonance imaging	7.9

Source: Organisation for Economic Co-operation and Development (2004).

All drugs sold in Sweden must be approved and registered by the MPA, which is the national authority responsible for the regulation and surveillance of the development, manufacture and sale of drugs and other medical products. For a drug to remain registered by the MPA, the manufacturing pharmaceutical company must apply every fifth year and account for any side-effects of the drug. Withdrawals of pharmaceuticals from the market can be made either after a decision from the MPA or upon a request from the manufacturer. The activities of the authority are regulated in a new law governing medical products, and which has been adapted to fit EU regulations (Medical Products Act 1992:859). There are approximately 6000 registered pharmaceutical products in Sweden.

Since October 2002, LFN has had the responsibility for deciding if a medicine or specific product should be subsidized, and then, through negotiations with the manufacturers, for setting the price. It is primarily the cost-effectiveness of various products that is to be assessed, and not the medical indications. However, the Board may make exceptions and decide that the drug should qualify for reimbursement for a particular indication or subgroup of patients. Thus, LFN could decide to allow reimbursement for a drug for a narrower indication than the one for which the drug had been licensed for marketing by the MPA.

The state-owned National Corporation of Swedish Pharmacies (Apoteket AB) has the exclusive right to retail medicines to the general public through community pharmacies. In addition, it operates hospital pharmacies under one-year contracts with the county councils. There are 900 pharmacies and another 1000 accredited agents nationwide. From 1 October 2002, a prescribed drug that qualifies for a subsidy has to be exchanged for the cheapest comparable generic alternative available at the pharmacy. Generic substitution does not apply to patented drugs. It is the MPA that determines which drugs are exchangeable.

Expenditure on pharmaceuticals increased substantially during the 1990s. This trend was influenced by both an increase in the number of prescriptions (the prescription index) which started in 1988 and by the introduction of new and more expensive pharmaceuticals. The cost of this pharmaceutical benefit increased by approximately 10% per annum at current prices between 1984 and 2002. However, during 2003, the increase in costs was only 2%, partly because of (1) the introduction of generic substitution and (2) patent expiry (National Board of Health and Welfare 2003c). There are several explanations as to why Swedish pharmaceutical expenditure has increased. New drugs are continually being introduced, either to replace older drugs or to cover new areas of drug treatment. These newer pharmaceuticals are often more expensive than the older ones and, as a result, expenditure increases. At the same time, the demand from patients is increasing (see Section 6.5 for the main areas of use of pharmaceutical preparations). Another reason behind the rise in costs for pharmaceuticals in Sweden was the absence of expenditure control mechanisms at county level. The budget for pharmaceuticals was transferred to the county councils as a result of the drug reform in 1998, which led to the implementation of cost-control measures (see Section 7).

The total cost of pharmaceutical sales of the National Corporation of Swedish Pharmacies in 2003 was SKr 28 341 million, of which 10% constituted sales to hospitals, 80% prescribed pharmaceuticals and 10% pharmaceuticals available to the public over the counter. The comparable figures for 1980, when total sales amounted to SKr 3619 million, were as follows: 17% for sales to hospitals, 74% for prescribed pharmaceuticals and 9% for over-the-counter sale to the public (Swedish Association of the Pharmaceutical Industry 2004).

Since 1998, the central government has allocated conditional grants, for drugs, to the county councils. These grants are settled after negotiations between the Federation of Swedish County Councils and the Government. The costs for pharmaceutical sales as a proportion of total health care expenditure rose from just over 8.8% in 1990 to over 14% in 2003.

In Sweden in 2003, the per-capita expenditure on drugs, including sales of over-the-counter drugs, was SKr 3518 (€350). The patient pays the entire

cost of his/her prescribed pharmaceutical preparations up to a certain level, and after that a rising scale of subsidy (with a high-cost ceiling) operates (see Section 4.1.3).

5.2 Human resources

5.2.1 Trends in health care personnel

In real terms, the number of health care staff has decreased since the beginning of the 1990s, with the exception of physicians, nurses and midwives. The number of staff employed in the health care sector, expressed per 1000, people dropped from 46.7 in 1992 to 31.9 in 2002. The main reason for this reduction in staff was structural change, i.e. a shift from hospital care towards primary care. The total number of hospital beds was reduced by more than 40% between 1993 and 2003, and this reduction caused a decrease in the average length of stay. In 2002, about 27 000 registered physicians and 91 000 registered nurses were employed in the county council sector in Sweden (see Table 5.3). There were approximately three physicians per 1000 inhabitants. Physician density varies among counties from approximately 2.3 to 4.4 physicians per 1000 inhabitants. Sweden has a relatively high proportion of physicians working at hospitals in comparison with the other Nordic countries. More than 60% of all physicians work in hospitals (Jönsson et al. 2004). The number of physicians and nurses has increased slightly faster than the growth in population since the mid-1990s. Expressed as health care personnel per 1000 inhabitants, the number of physicians and nurses has increased, whereas the number of dentists and other health care personnel has been quite stable during the past decade (see Table 5.3).

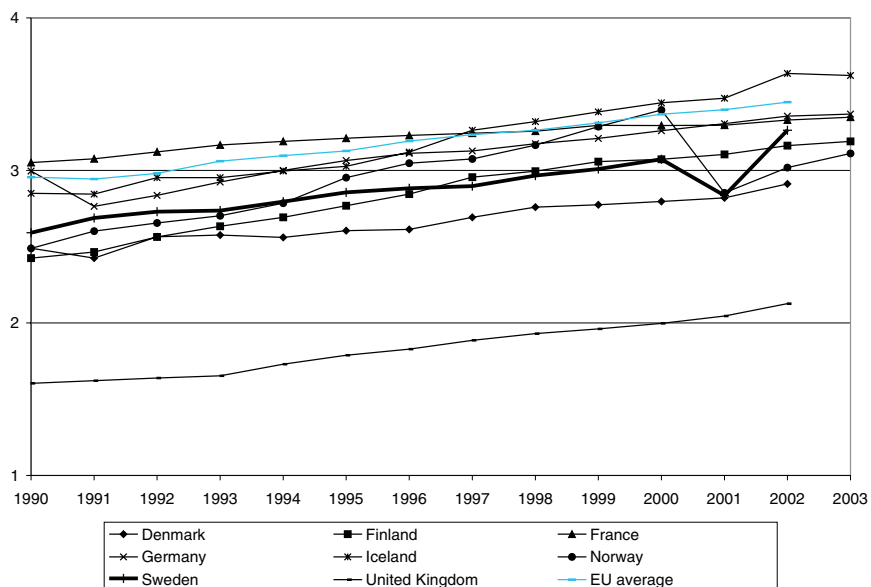
Compared to its Nordic neighbours (Denmark, Finland and Norway), Sweden had fewer physicians per 1000 inhabitants in 2000. The number of physicians per inhabitant for Sweden was also below the EU average. There were more nurses in both Norway and Finland in 2000 than in Sweden, but Sweden was above the EU average and at the same level as Denmark. Viewed over the past 20 years, Sweden had more physicians per 1000 inhabitants than Norway and Finland until the mid-1990s (see Fig. 5.3 and Fig. 5.4).

Table 5.3 Active licensed health care personnel in the health care sector (including the private sector), 1995–2002

Personnel	1995	1996	1997	1998	1999	2000	2001	2002
Physicians	23 176	23 490	23 626	24 163	24 528	25 099	25 957	26 873
per 1000 people	2.6	2.7	2.7	2.7	2.8	2.8	2.9	3.0
Nurses	83 934	83 941	83 331	85 057	86 135	86 925	88 441	90 758
per 1000 people	9.5	9.5	9.4	9.6	9.7	9.8	9.9	10.2
Midwives	5 722	5 807	5 814	5 953	6 043	6 024	6 157	6 247
per 1000 people	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Dentists	7 620	7 434	7 216	7 229	7 221	7 140	7 199	7 270
per 1000 people	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Dental hygienists	2 018	2 061	2 075	2 211	2 339	2 492	2 656	2 770
per 1000 people	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

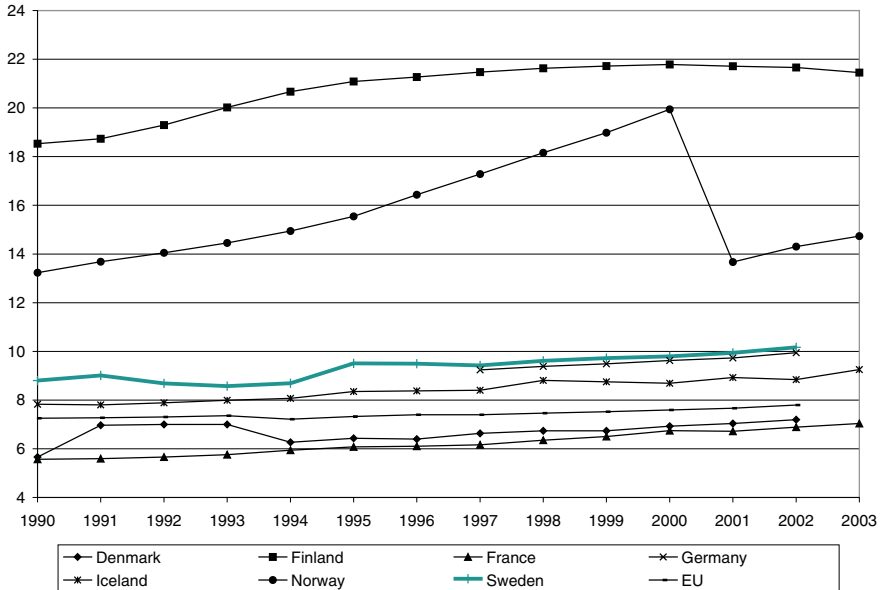
Source: National Board of Health and Welfare (2004b).

Fig. 5.3 Number of physicians in Sweden and selected countries per 1000 people, 1990–2003



Source: WHO Regional Office for Europe health for all database, June 2005.

Fig. 5.4 Number of nurses in Sweden and selected countries per 1000 people in 1990–2002



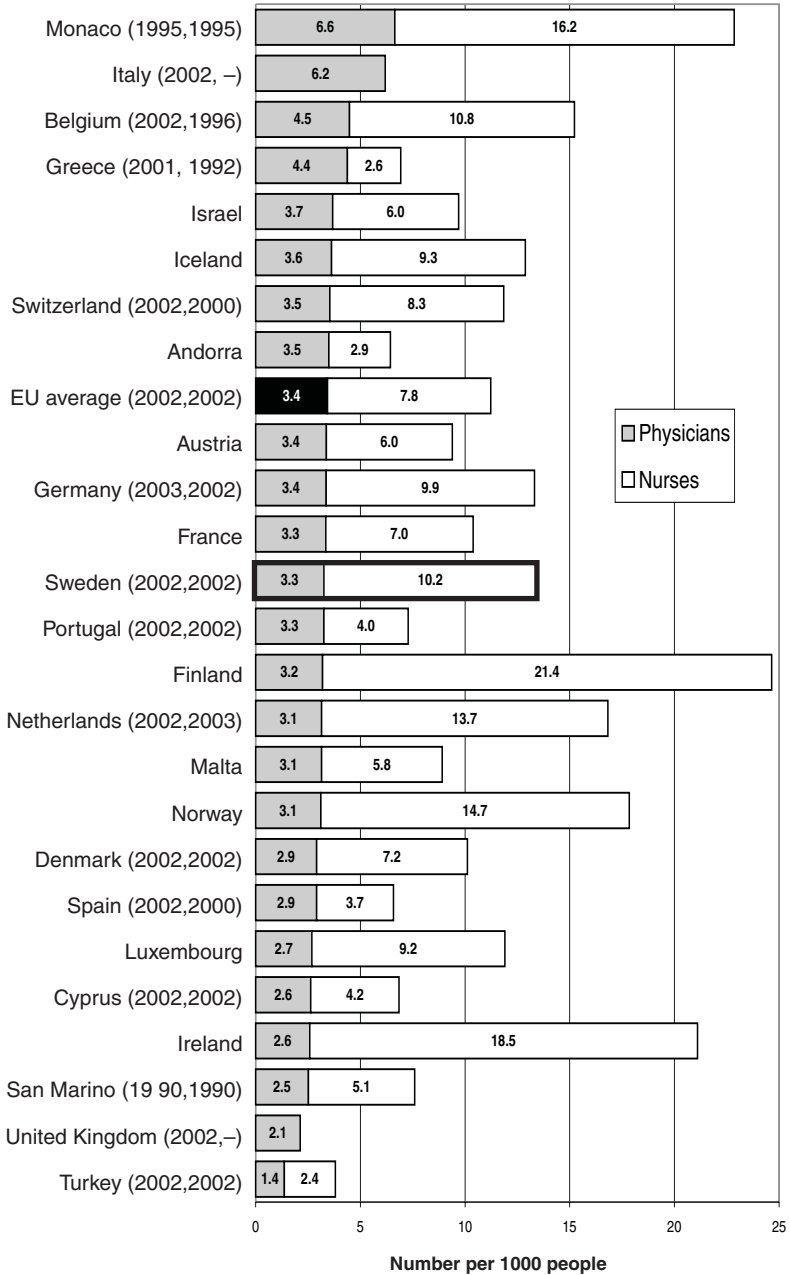
Source: WHO Regional Office for Europe health for all database, June 2005.

In Sweden in 2002, the number of physicians per 1000 inhabitants was 3.3 and the number of nurses per 1000 inhabitants was 10.2 (see Fig. 5.5). The number of physicians was similar to those in other Nordic countries. The number of nurses (per 1000 inhabitants) in Nordic countries varied from 21.4 (Finland) to 7.2 (Denmark), which puts Sweden somewhere in the middle with regard to this indicator.

5.2.2 Planning for health care personnel

Universities and colleges are directly accountable to the central government in Sweden. There are 13 universities and 23 university colleges throughout the country, and some additional private education providers (10) are entitled to confer different health care qualifications. The National Agency for Higher Education (Högskoleverket) is the authority responsible for providing the Government with information upon which to base decisions regarding the planning of education at the universities. The agency’s remit is to assess current and future demand for different staff categories.

Fig. 5.5 Number of physicians and nurses per 1000 people in western Europe, 2003 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2005.

Note: EU: European Union; countries without data not included.

At present, there is a shortage of staff for services to the elderly and the disabled, and this shortage is not expected to be solved in the near future. There is a continual need to recruit care personnel for these services, partly because of the high levels of sick leave among staff in this sector. The number of personnel (primarily nurses and social services staff) needed for care of the elderly and the disabled is expected to be 200 000 by the year 2015, if current trends continue (National Board of Health and Welfare 2003d).

With regard to the training of physicians, the number of medical students is limited, and every year approximately 1100 students begin medical training. In a recent report, it was estimated that the number of medical students needs to be increased by 30% in order for Sweden to be self-sufficient in meeting the population's future needs for physicians (National Agency for Higher Education 2004). A similar situation exists in dentistry: the number of dentists being trained is currently believed to be too low. The number of dentists is forecast to decrease substantially over the next 15 years, from approximately 7300 (in 2002) to 4700 (in 2020), primarily because of retirements and also because a relatively high proportion of dentists trained in Sweden choose to work in other countries (National Board of Health and Welfare 2004c). During the past years, a substantial proportion of the new certificates issued to Swedish physicians have been given to people that have graduated in other countries.

5.2.3 Training of health care personnel

In Sweden, medical education is entirely financed by the State. The training of doctors, dentists and other medical staff is linked to the university hospitals and other relevant parts of the medical services. Sweden has six medical schools at which physicians are trained. These are the universities of Lund, Gothenburg, Linköping, Stockholm (Karolinska Institute), Uppsala and Umeå. 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. After this, the physician is registered and is authorized to practise in the medical profession; however, almost all physicians choose to continue their studies in order to qualify as specialists after 5 years of service in one of the 62 recognized specialties. To become a consultant or head of department, a physician needs five years of postgraduate specialist training. Dentists are trained at the universities of Gothenburg, Stockholm (Karolinska Institute), Umeå and Malmö. The study programme lasts for five years.

Registered physicians and dentists negotiate their salaries with their employers. In 2003, the average salary for a physician with a specialist degree

was around SKr 48 100. The average salary for a dentist was SKr 35 300. There are, however, differences across the various specialties and regions. Also, male physicians and dentists tend to have higher salaries than their female counterparts (Statistics Sweden 2004e).

Nurses are educated at approximately 30 universities, university colleges and independent programme providers spread throughout the country. Every year, the number of students beginning nursing training is about 5500. The study programme for nurses consists of three years of basic education, followed by specialist training. Nurses can choose to train in midwifery or intensive care, anaesthesia, community nursing or child nursing; this part of the training lasts from 40 to 60 weeks. Training in occupational health nursing lasts for 10 weeks after a general nursing education and two years of post-certification experience. In 2003, the average salary for a registered nurse was SKr 23 000 (Statistics Sweden 2004e).

The responsibility for continuing professional education for all employed medical staff lies with the employer.

5.2.4 Registration/licensing

The National Board of Health and Welfare has a supervisory function with respect to all health care personnel. The Board is also the licensing authority for physicians, dentists and other health-service staff. The licence is given for an unlimited period of time, i.e. once health care professionals have been given the right to practise they do not have to apply to keep that right. However, in cases of malpractice, licences can be withdrawn. The National Board of Health and Welfare is also the designated authority, under EU directives for the mutual recognition of diplomas concerning health professions.

HSAN is the government agency that makes decisions on disciplinary measures in the event of complaints or possible malpractice. It can enforce disciplinary measures such as warnings, and can limit, or even withdraw, a health care professional's right to practise (see Section 3.1.2 for statistics on disciplinary measures).

6. Provision of services

6.1 Public health

By international standards, the health of the Swedish population is very good. Of the Nordic countries, Sweden has the longest life expectancy, this being 77.9 years for men and 82.4 years for women in 2003. Average life expectancy rose during the 1990s, and Sweden currently has one of the world's oldest populations. Infant mortality is low: it was 3.0 deaths per 1000 live births in 2002 (see Table 1.3 and Table 1.5). The present health situation is a result of long traditions in Sweden of publicly organized comprehensive public health services, such as mother-and-child health care, school health, and vaccination and screening programmes (National Board of Health and Welfare 2004a; 2005).

The aim of national public health efforts is to improve public health and reduce differences in health between different population groups and geographic regions. People should have the same opportunities to enjoy good health, irrespective of gender, class, ethnic background or disability. This is reflected in the national public health objective adopted by the central government, which is "To improve public health for the groups in society that are the most disadvantaged from a health perspective" (Government Offices of Sweden web page 2005-01-06). In April 2003, the Government adopted a Bill entitled "Public Health Objectives" (Government Bill 2002/03:35), which stakes out a new direction for national public health policy. In presenting this Bill, the Government wanted to improve public health and reduce differences in health between various population groups. The Government also laid down a national public health target, namely the creation of social conditions to ensure good health, on equal terms, for the entire population. In this Bill, the Government adopted a broader approach in its public health efforts. The new public health

policy articulates a more distinct focus on health promotion compared to the former. The advantage of concentrating on health promotion is that public health work will become more effective when focused on factors that determine health instead of the diseases themselves.

Initiatives aimed at creating good conditions for healthy lifestyles across the population are included in the policies for public health. These initiatives include programmes targeted at preventing the harmful effects of alcohol, drug and tobacco abuse and gambling addiction, and at promoting physical activity, healthy diet habits and sexual and reproductive health. Furthermore, communicable disease control, such as the prevention of HIV/AIDS, is part of this policy area. National public-health policy and initiatives involve almost all government agencies. As many factors important to health are affected by policies adapted in other areas, coordination between the ministries of government offices is crucial in the public health area. In 1992, the Government established The National Institute of Public Health. This body is responsible for providing guidelines and for steering and monitoring the activities of county councils and municipalities in the field of public health.

The Centre for Epidemiology monitors and analyses the health and social status of the population. In collaboration with the WHO Regional Office for Europe, the Centre has developed an epidemiological and social information database that includes indicators on health, disease, social problems and risk factors at the national, regional and municipality levels. At the national level, Sweden has several registers covering different aspects of the health status of its citizens (see Section 3.2.2).

Most public-health work is undertaken at local level by the county councils and the municipalities, and by nongovernmental organizations. County councils and local authorities are responsible for health care and for the wellbeing of residents. The Government supports the county councils' disease-prevention and health promotion work through annual transfers of funds. There is a national vaccination programme for children, which was recommended by the National Board of Health and Welfare, and the immunization levels in Sweden are among the highest in the WHO European Region (see Table 1.4).

The actual responsibility for offering people social help and support rests with the municipalities. They play a central role in implementing preventive measures, and also in such areas as alcohol abuse and providing care for alcohol abusers. Recently, the focus of public health at municipal level has shifted towards the structural determinants of health, e.g. unemployment, education and the environment. Practical public health activities take place at local level, in the child-care sector, in schools and in the workplace. School nurses and teachers give general health education.

Preventive and population-oriented health care has been integrated into primary health care. At health centres, measurement of blood pressure and blood cholesterol is determined by the clinical situation or is obtainable by request. Special health education programmes on tobacco, diet and/or alcohol are all functions generally carried out by general practitioners. General practitioners are also involved in providing some diagnostic services, in immunizing children and in paediatric surveillance. Some programmes, especially with regard to women's health (cervical cancer and breast cancer screening), are usually organized by the county councils and are centrally planned. Midwives, district nurses and general practitioners provide family-planning services.

Environmental protection has long been considered an important issue in Sweden. Despite the implementation of measures for an improved environment, several environmental health risks remain, such as air pollution from traffic, high radon levels in indoor air, exposure to tobacco smoke, poorly ventilated schools and day-care centres, and noise. A report produced by the Environmental Health Commission in 1996 indicated that the following areas require particular attention in Sweden: asthma and respiratory problems; lung cancer; malignant melanomas; accidents; the deposit of resistant substances in the human body; and food processing.

The municipalities are responsible for the major part of local environmental policy. Their responsibilities include disease prevention, assessment of food quality, animal protection, nature management and conservation, water management, assessment of drinking-water quality, sewerage policy, waste disposal, supervision of environmentally hazardous activities, and chemical control. Municipalities also work on new forms of environmental auditing and accounting, as well as on new environmental tariffs in order to improve protection, food quality and animal welfare. Environmental safeguards in the form of natural-resource management and structural planning are central. Agenda 21, signed at the Rio Summit on World Environment in 1992, emphasizes sustainable development and summarizes much of the role of local government (Agenda 21, Rio de Janeiro, 1992). The Swedish Association of Local Authorities works to ensure that the approach outlined by Agenda 21, covering the environment, welfare and public health, is emphasized in municipal activities.

6.2 Patient pathways

Swedish health care policies during the past 25 years have focused on patients' rights, as demonstrated by the priority given to patients in great need of health

care services, increased opportunities for patients to choose the health care provider, and improved health care guarantees. The waiting time for health care services varies greatly depending on the type of service required and the specific county council involved. In 2003, 90% of all patients acutely in need of care (i.e. 45% of total contacts in primary care) received a consultation with a physician on the same day; the remaining 10% were seen within 2 days. With regard to consultations at hospitals, in some areas more than 87% of the patients had an appointment within three months, yet in other areas only 47% were able to see a physician within the same period of time. For treatment at hospitals, the waiting times varied even more. In some county councils, as many as 94% of patients received treatment within 3 months; the corresponding figure for some other county councils was as low as 23%. Surgical clinics have longer expected waiting times than the medical clinics. At the surgical clinics, the longest waiting lists are found in orthopaedics and plastic surgery, and the corresponding departments within the medical clinics are allergology, rheumatology, neurology and dermatology (Federation of Swedish County Councils 2003b).

In 1992, the Government granted extra funding to the county councils, and gave patients who did not receive care within 3 months the right to seek treatment outside their respective county. This guarantee of treatment was made with the purpose of reducing waiting times for certain treatments and operations. It incorporated 12 procedures estimated to account for approximately 20% of the total volume of surgeries within the health care. In 1996, the original guarantee was replaced with another guarantee aimed at shortening the waiting times for patients' first contact within primary and specialist care. In addition to being subject to the national guarantees, the county councils can employ local guarantees. Until November 2005, the national care guarantee implied:

- that primary care shall provide help (telephone or consultation) on the same day as the contact takes place;
- that patients in need of a medical examination are entitled to this service within 7 days;
- that patients with a referral to a specialist must not wait more than 90 days;
- that if patients are not admitted within this timeframe they have the right to choose another provider without providing any extra payment (Federation of Swedish County Councils 2003b).

On 1 November 2005, a new maximum waiting-time guarantee was introduced in Sweden. This new guarantee gives the patient a stronger position, improves accessibility and makes it possible to ensure that the situations in different parts of the country become more equitable. The guarantee is based

on the “0–7–90–90” rule – meaning instant contact (zero delay) with the health care system; seeing a general practitioner within 7 days; consulting a specialist within 90 days; and waiting of no more than 90 days after being diagnosed to receive treatment. The guarantee will be the same for the whole country and will include all elective care in the county councils.

During the second half of the 1990s, the county councils introduced a system intended to allow individuals to choose where to seek care (free health care seeking). These agreements are not regulated by law. It is up to each county council to decide on the framework and the extent of such agreements. However, according to the Health and Medical Services Act, if a patient is not offered appropriate care in the county council in which he/she resides, the county council has to arrange for the patient to receive treatment at a hospital in another county council. A patient can also, by law, seek a second opinion in another county council area. However, the county council is not obliged under law to offer care to people not residing in its geographical area. Thus, if neighbouring county councils also have long waiting lists, the patient still has to wait for care.

Normally, a patient’s first health care contact is with a general practitioner at a local health centre, but patients can seek care at private clinics as well. Each county council also has a 24-hour telephone “hot lines” so that patients can get medical advice, from a registered nurse, and information about where to seek care if necessary. Patients are referred to county or regional level if the necessary resources (i.e. equipment or knowledge) are not sufficient at the health centres. The referral process varies across the county councils: in some counties the general practitioners have a “gatekeeping” role (Federation of Swedish County Councils 2004d). Normally, the general practitioner either makes an appointment for an appropriate caregiver for the patient, (i.e. with a specialist, a diagnostic centre, a laboratory or a hospital) or provides the patient with a referral letter so that he/she can make the appointment. Patients can also seek care directly at hospital outpatient departments. Usually waiting times are longer when patients go directly to a hospital outpatient department without a referral from a general practitioner (Federation of Swedish County Councils 2003b). The fee for outpatient care at hospital outpatient department is higher than the fee charged at primary care health centres. In almost all county councils, people below 20 years of age are exempted from patient fees. A few county councils have charges for people under the age of 20, but the fees are lower than for adults (see Section 4.1.3).

A woman in need of a hip replacement because of arthritis would take the following steps within the Swedish health care system.

- Depending on which county council is involved, a referral might be required, or she could contact a specialist directly. If she is to consult a primary care physician, she pays SKr 100–150. The primary care physician then refers her to a hospital orthopaedic department.
- The primary care physician can prescribe any necessary medication.
- She is free to choose any hospital in Sweden. (If the hospital is private, there has to be an agreement with the county council regarding the health care provision.) Thus, the primary care physician makes the referral in consultation with the patient.
- She can choose to go to a private hospital (although the number of private hospitals in Sweden is limited); she must pay in full for treatment in a private hospital.
- After referral she must wait for no more than 90 days to get an appointment for examination by a specialist; the user charge for this is SKr 200–300.
- She will then have to wait for inpatient admission and surgery.
- The responsible physician, together with staff from social care services, staff from other outpatient services and the patient herself, then develops a care-plan once the patient has been fully medically treated, which means that she will no longer require hospital care.
- When she has been fully medically treated and the care-plan is ready, the responsibility for care is transferred from the county council to the municipality.
- The municipality is responsible for providing rehabilitation, i.e. either institutional care or home-based care. A physician within the primary care sector holds medical responsibility.

6.3 Primary/ambulatory care

The aim of the primary care sector is to improve the general health of the population and to treat diseases and injuries that do not require hospitalization. The primary care services include both basic curative care and preventive services delivered through the local primary health care centres. The main guidelines for primary care level are as follows: comprehensiveness; closeness and accessibility; continuity; quality; and safety. According to the Health and Medical Services Act, primary health care in Sweden shall “without limitations regarding diseases, age or patient-group seek to fulfil the population’s need for basic medical treatment, care, preventive services and rehabilitation which

do not require the hospitals' medical and technical resources or other special competence”.

Primary health care is responsible for guiding the patient to the right level within the health system. According to a government decision in 1995, all physicians in primary care must be specialists in general practice. 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 health care. Patients normally see physicians by appointment. General practitioners provide treatment, advice and prevention. Others directly employed at this level are nurses, midwives, physiotherapists and gynaecologists, who also constitute part of the health-centre staff.

Primary care services include vaccination programmes for children, pregnancy checkups, health examinations and consultations, as well as certain types of treatment. The general practitioner usually provides the first health-service contact for adults or elderly people who have mainly physical health problems or minor mental health problems. People with more serious mental health problems usually go directly to psychiatric services (see Section 6.10). In many cases, the general practitioner also provides the first health-service contact for children, although this function is shared with paediatricians and district nurses. Specifically female health problems are mostly covered by obstetricians, gynaecologists, district nurses or midwives. Midwives also have limited rights to prescribe contraceptives.

District nurses play a special role, as many first contacts with the health care system are their responsibility. Often, they make a first assessment of patients and, if necessary, direct them to the health centre's general practitioners or refer them to the hospital. They are also involved in home care, and regularly make home visits, especially to the elderly. District nurses have limited rights to prescribe pharmaceuticals. However, they do not have sole medical responsibility, but act, instead, under the supervision of physicians.

It is up to each county council to decide how to deliver primary care to the population for which it is responsible. Even if primary care is mainly publicly provided, there are also private providers at this level. In addition to local health centres and family-physician surgeries, private physicians and physiotherapists, district-nurse clinics and clinics for child and maternity health care provide primary care. Private health centres and practitioners are relatively common in major cities and in urban regions. In 2003, Sweden had around 1100 health centres, of which approximately 300 were privately run. In 2003, just over 12 million contacts were made with physicians within the primary care sector, 27% of which were conducted at private facilities. About 29% of all physician

consultations in the outpatient care sector were conducted at private facilities (Federation of Swedish County Councils 2004e). Most private providers have contracts with a county council and are reimbursed with public funds for seeing patients. Very few private physicians receive direct remuneration from their patients for consultation and treatment. Every physician who intends to offer private health care must report this to the National Board of Health and Welfare.

From an international perspective, Sweden has relatively few physician contacts per person. During 2003, the number of outpatient contacts in Sweden was 2.8 per person (visits at outpatient departments and health-centre units, both public and private). As shown in Table 6.1, this number has been quite stable since 1997.

Because of the tradition, in Sweden, of strengthening hospital care, primary health care, especially in the bigger cities, has not received adequate attention. The drawback of this situation is that patients often bypass general practitioners and go directly to hospital emergency departments. In addition, there is a lack of general practitioners in some areas.

Table 6.1 Total number of outpatient contacts (publicly financed), 1997–2003

	1997	1998	1999	2000	2001	2002	2003
Total number of outpatient contacts, thousands (excluding antenatal clinic/child welfare centre)	24 725	25 670	25 452	25 174	25 631	25 619	24 880
per capita	2.8	2.9	2.9	2.8	2.9	2.9	2.8

Source: Federation of Swedish County Councils (2004b).

6.4 Secondary/inpatient care

For conditions requiring hospital treatment, medical services are provided at county and regional hospitals. In Sweden, a relatively large proportion of the resources available for medical services has been allocated to the provision of care and treatment at hospital level.

The hospitals in Sweden are divided into district county hospitals, central county hospitals and regional hospitals, depending on their size and degree of specialization. In the approximately 40 district county hospitals, there are at least four specialties: internal medicine, surgery, radiology, and anaesthesiology. In 2001, the average number of hospital beds was 151 per district hospital (National Board of Health and Welfare 2002d). The medical competence and equipment available at the central county hospitals enables the treatment

of almost all types of disease, including psychiatric problems. Somatic care is provided through both inpatient and outpatient care. Currently, there are approximately 20 central county hospitals in Sweden, i.e. one hospital for each county council area. The central county hospitals serve as referral hospitals for their geographical area. In these hospitals, there are about 15–20 specialties, and in 2001 the average number of beds per hospital was 458 (National Board of Health and Welfare 2002d).

For highly specialized care, Sweden has six large medical care regions, in which the county councils cooperate. There are one or two regional hospitals per region, and they serve a population of 1–2 million inhabitants. The reason for this organization of highly specialized care is that the county councils, through cooperative planning, are able to use available resources in the most efficient way. Regional hospitals provide an extensive range of medical specialties, and have a broader spectrum of specialists and subspecialist fields than county hospitals. These hospitals also provide secondary care to the residents of their county councils. According to legislation, regional care encompasses those few patients who present especially difficult problems; this demands cooperation among a number of highly trained specialists, as well as specialist equipment that is costly and difficult to use. Regional care also encompasses diseases that occur so rarely that physicians at county level lack experience as to their treatment (Ministry of Health and Social Affairs 2004). The council of the county in which the regional hospital is located owns and administers the hospital, and the neighbouring county councils reimburse the administering county for care provided to their respective inhabitants. Its activities are regulated by agreements among the county councils within each region. There are eight regional hospitals in Sweden, of which seven are affiliated with a medical school and also function as research and teaching hospitals. Central government compensates for the costs associated with teaching and research. In 2001, the regional hospitals each had, on average, 1025 beds, which is a relatively large number in comparison with the same type of hospital in other countries (National Board of Health and Welfare 2002d).

Total inpatient care decreased during the 1990s from an average of 1.6 days per person (in 1994) to 1.1 days per person (in 2000) (National Board of Health and Welfare 2002d). The decrease occurred mainly in the older age groups. At the same period, outpatient care increased. There are several explanations for these changes. First, outpatient care received greater emphasis during the 1990s. The number of visits to physicians in outpatient care has increased and the nature of these visits has changed. For example, consultations with medical staff other than doctors have been encouraged, and new and more effective treatments (such as day-care surgery) have been introduced. Moreover, there has been a change in general care practice. From 1992 onwards, the municipalities

assumed economic responsibility for elderly patients who had been fully medically treated. This has given the county councils an incentive to report patients as having completed their clinical treatment at an early stage and, at the same time, it gave municipalities the incentive to encourage discharge of patients from hospitals into special housing or home care. Ultimately, an increase in the numbers of people getting advanced home care might also lead to fewer inpatient days.

Public hospitals are larger than private hospitals and have more highly specialized sectors and equipment. They also have a different patient distribution. For the most part, private hospitals (both for-profit and not-for-profit) tend to concentrate on care that requires smaller investment. Private-hospital inpatient care is provided in few small, traditional hospitals in the larger cities. At these hospitals, both outpatient care and advanced hospital care, such as elective surgery, are offered.

6.5 Pharmaceutical care

All pharmaceuticals in Sweden are distributed and sold to the general public by the state-owned National Corporation of Swedish Pharmacies (Apoteket AB). It operates hospital pharmacies under one-year contracts with the county councils, as well as community pharmacies. There are 900 pharmacies nationwide and another 1000 accredited agents – mainly grocery stores in rural areas. Before a new drug or medical product can be sold, it must be approved and registered by the MPA – a national authority responsible for regulation and surveillance of the development, manufacture and sale of drugs and other medicinal products.

There are approximately 6000 registered pharmaceutical preparations in Sweden. The three main medical areas of use, according to the anatomical therapeutic chemical classification system, in pharmaceutical sales are the central nervous system (19.6%), the cardiovascular system (13.9%) and the alimentary tract and metabolism (11.9%) (Swedish Association of the Pharmaceutical Industry 2004). The three largest groups at the second level, according to the anatomical therapeutic chemical classification system, are psychoanaleptic drugs, anti-asthmatic drugs and analgesic drugs.

The level of consumption of pharmaceuticals has increased from 1518 to 1632 defined daily doses per 1000 inhabitants per day between the years 2000 and 2003 (National Corporation of Swedish Pharmacies 2004; our own calculations). In 2003, the per-capita expenditure on drugs was SKr 3518 (€390). The patient pays the entire cost of prescribed pharmaceutical preparations, up to SKr 900. Above this value, a rising scale of subsidy operates, with a high-cost

ceiling, which means that the patient never has to pay more than SKr 1800 in any 12-month period.

LFN has the responsibility of deciding if a medicine or specific product should be subsidized. The Board makes its decisions primarily based on the cost-effectiveness of various products. LFN may decide to reimburse a drug for a narrower indication than the one for which the drug has been licensed for marketing by the MPA. From 1 October 2002, any prescribed drug, which qualifies for a subsidy, have to be exchanged for the cheapest comparable generic alternative available at the pharmacy. It is the MPA that decides which drugs are exchangeable.

Since 1998, the central government has allocated conditional grants for drugs to the county councils. The grants are selected after negotiations between the Federation of Swedish County Councils and the central government. The cost of this pharmaceutical benefit had been increasing by approximately 10% per annum (in current prices) between 1984 and 2002. However, during 2003 the increase in costs was only 2%, partly because of the introduction of generic substitution and the expiry of patents (National Board of Health and Welfare 2003c). In 2003, the costs of pharmaceutical preparations constituted approximately 15% of total health care expenditure. When hospitals purchase pharmaceuticals solely for their own use, they negotiate any discounts directly with suppliers, although the process is regulated under the Law on Public Purchase. Within the county councils' health districts, pharmaceutical committees draw up drug formularies listing which pharmaceuticals are to be used, primarily for outpatient care.

6.6 Rehabilitation/intermediate care

Most patients who are discharged from hospital are in great need of continuing care from the primary care sector. The information regarding a patient's care needs is sometimes formally transferred between the hospital and the primary health care facility where the patient resides. In some cases, the hospital makes contact directly with a district nurse. This way of handling patients in need of outpatient care has been shown to be less successful, since it has not always been clear which type of care each different practitioner should be providing. A new method for improving cooperation in health care between primary and hospital care has been introduced in some county councils. General practitioners from the primary care sector spend a certain proportion of their working time at hospital clinics every month in order to share knowledge about the work and resources available at health centres. In turn, they also inform

those at primary care level about problems and issues of interest and concern in hospital clinics. This type of care programme, aimed at improving both the quality of care and the cooperation between physicians, has been developed locally by general practitioners and specialists. Demand for care programmes has increased recently, leading to the development, by the National Board of Health and Welfare, of national care programmes for larger groups of patients, such as people with diabetes.

The county councils are responsible for patients until the patient is fully medically treated, i.e. 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 the patient is fully medically treated and a care-plan has been developed, responsibility for the patient is transferred to the municipality. The responsibility for home nursing and rehabilitation lies between the county councils and the municipalities, which causes tensions. In general, medical care and rehabilitation are perceived as being inadequate, especially for people living in their own homes (SOU 2004:68). Treatment by physiotherapists, etc. is covered by the high-cost-protection scheme according to the same principles that apply for other health care services.

6.7 Long-term care

Sweden has one of the world's oldest populations. In 2003, approximately 17% of the inhabitants were aged 65 years or over, and approximately 5% were aged 80 years or over (National Board of Health and Welfare 2004d). Care of the elderly in Sweden is almost entirely financed by taxes, so the service users cover only a fraction of the costs.

The Social Services Act of 1980 specifies that the elderly have the right to receive public services and help at all stages of life. In addition, elderly and disabled people are normally entitled to subsidized transport to health care facilities. During the 1990s, care for the elderly was altered extensively as a result of changes in the population structure, the economic recession at the beginning of the 1990s, and several national reforms within the health care sector. The ÄDEL Reform implied a shift of responsibility (for care of the elderly) to the municipalities, and the workload in relation to both institutional care and home-based care increased. As a consequence, a "de-medicalization" of care for the elderly took place (Andersson and Karlberg 2000). The number of beds in county council hospitals has been significantly reduced since 1992, and most of the beds for geriatric care have been lost. During the 1990s, the

municipalities did not have the financial capacity to expand care for the elderly to cover for the reduction in hospital care. In 1993, some 23% of people aged 80 years or over received home-help services; the corresponding figure in 2003 was 19%. It should be noted, however, that even though the coverage ratio is declining, the quantity of services remains large. In 2003, 20% of elderly people receiving home help were provided with at least 50 hours of support each month. There has been a shift in resources to those who are in greatest need of help (National Board of Health and Welfare 2004d).

As of 1 October 2003, approximately 238 900 old-age pensioners were permanent residents in special housing (128 000) or were granted home-help services in ordinary housing (110 900). The number of elderly people receiving home-help services increased by about 6% (approximately 7100 individuals) between the years 2000 and 2003. It was the group of people aged 80 years or over and receiving home-help services that increased; the size of the group comprising people aged 65–79 was reduced. Compared to the year 2002, there has been a decrease of approximately 6% (approximately 7400 individuals) in the number of persons residing in special housing (Swedish Association of Local Authorities 2004).

Of the home-help services granted to persons aged 65 years or over in 2003, approximately 9% of the total services was provided within the private sector. The corresponding figure for the year 2000 was around 7%. Around 13% of special housing was provided within the private sector; this figure compares with 11% in the year 2000. The private providers have contracts with the municipalities so that they can be reimbursed for their services (Swedish Association of Local Authorities 2004).

With regard to the challenges facing the provision of social services to the elderly, the shortage of skilled personnel is the most important one. The structural changes that have taken place within the Swedish health care sector over the past decade are a major reason for this shortage of staff. The ÄDEL Reform of 1992 transferred the liability of fully medically treated patients from the hospitals to the primary care sector, which led to an increased need for health care personnel in the latter sector. The municipalities are experiencing difficulties in recruiting nurses and paramedical staff at the same time as the social services are increasingly facing complex needs, e.g. patients with multiple diagnoses. This requires integrated care between the county councils and the municipalities for those elderly people who need extensive assistance.

With regard to care of the disabled, the principle is that everyone is of equal value and has equal rights to good health and to receiving health care services. In 1994, the Disabled People Reform extended the rights of people with functional impairments. People with disabilities are entitled to support under the Social

Services Act and under special legislation, namely the Act Concerning Support and Service for Persons with Certain Functional Impairments (1993:387). This Act includes support in the form of personal assistance, contact persons and daily activities, for example. The municipalities are responsible for the social services and the county councils for health care. The supervision of social services for disabled people rests with the regional government (Länsstyrelsen), whereas health care in the form of home help and institutional care is the responsibility of the National Board of Health and Welfare. According to a report on care for the disabled, the social services measures implemented by the municipalities in line with the Act Concerning Support and Service for Persons with Certain Functional Impairments have increased since 1998 (National Board of Health and Welfare 2004e). This has resulted in an escalation (19% since 1998, fixed prices) in the municipalities' costs for support and service to the disabled. However, the costs of particular social services vary widely across the different municipalities.

6.8 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 the elderly. Municipalities can decide to reimburse informal carers under certain circumstances ("relative-care benefits"). During 2003, some 5500 elderly people were entitled to relative-care benefits. An additional 2000 elderly people received help from relatives employed by the municipalities, so called "relative-care employment" (Swedish Association of Local Authorities 2004). Data from national surveys among elderly people living at home confirm that informal carers provide an increasing amount of services. There is no evidence that the development of an extensive formal care system has brought about a decrease in the amount of informal care.

6.9 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 problem associated with life-threatening illness, through

the prevention and relief of suffering by early identification and impeccable 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 2004f).

The objectives of care of the elderly 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. 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. (National Board of Health and Welfare 2003b).

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.

6.10 Mental health care

Psychiatric care is an integrated part of the health care system and is subject to the same legislation as all other health care services, i.e. it comes under the provision of the Health and Medical Services Act. 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 the care of people suffering from serious mental problems when it is considered that care should be provided on a compulsory basis, e.g. in cases in which an individual refuses care and, as a result of his/her mental problem, is a threat to the personal 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 problem. The Act primarily applies to people who are committed for compulsory mental care as a penalty for crime. The total number of people in compulsory mental care has largely remained the same since the 1990s, but there has been a shift towards a greater proportion of patients being sentenced to forensic mental care.

The responsibility for patients with mild to moderate mental health problems lies with the primary care sector, as with patients with physical health problems that do not require hospitalization. Patients with severe mental health problems are referred on to specialized psychiatric care in hospital.

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 passed to the municipalities. This Reform, among other factors, resulted in a steady decrease in the number of psychiatric hospital beds during the 1990s – from 14 533 in 1990 to 4606 in 2003 (see Section 5.1.1). The number of doctors' visits within psychiatric primary care increased from 65 to 68 visits per 1000 people between 1997 and 2000 (National Board of Health and Welfare 2002d).

The Swedish Disability Act and the Act Concerning Support and Services for Persons with Certain Functional Impairments (1993:387) state a number of specific forms of assistance to which people with mentally disabilities are entitled, including counselling and support, personal assistance, housing with special services, access to contact persons and to companions. Specialized psychiatric care in Sweden includes psychiatric consultations, psychiatric day care, psychiatric home care and psychiatric inpatient care. Swedish mental care has become more outpatient-directed over the past 50 years, and the inpatient-care part is decreasing.

According to a report evaluating the 1995 Psychiatric Care Reform, the changes meant that around 85% of the municipalities (covering 93% of the Swedish population) had to carry out inventories to identify the quantity and type of social assistance required by people with mental disabilities and living in the community. Prior to this survey, there was a lack of such information, which made the planning of social assistance activities for those with mental illnesses very difficult. Approximately 70% of those with mental disabilities live in their own homes; the rest live in institutions (National Board of Health and Welfare 1999). An important aspect of the reform was the coordination of psychiatric and primary care activities with social services. According to the National Board of Health and Welfare, residential, residential assistance and occupational activities have been expanded, and cooperation has been established between psychiatry care and social services. However, further progress is still needed if the reform is to have the intended effects. In 2003, the Government appointed

a national coordinator for psychiatry in order to strengthen the quality of care for people with mental illnesses or psychiatric disabilities.

Sweden has agreed to adhere to the United Nations' standard rules for disabilities policy, and all authorities and organizations must work to ensure that the rules are translated into practical action.

6.11 Dental health care

County councils have 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. Important changes occurred in 1999, when fixed and nominal subsidies for different types of dental services, together with free pricing for providers, were implemented. Under the Dental Care Act, the county councils are responsible for providing free dental care for children and young people (up to the age of 19 years), with an emphasis on preventive care. The dental health of this group has improved considerably since the 1970s. Adults receive a subsidy for basic dental care from the national dental insurance system. Previously, the reimbursement was based on a percentage of the fixed national tariff, but now the subsidies are fixed according to the type of treatment involved. For certain more extensive dental procedures, there is a special high-cost protection system for those aged 65 years or over; this was implemented in July 2002. For elderly and disabled people under municipal care, the same high-cost protection scheme that operates for health care also applies for dental care (see Section 4.1.3).

6.12 Alternative/complementary 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,

i.e. 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 the age of 8 years.

There are approximately 200 alternative treatment technologies in Sweden. Some of them are also relatively common in the Swedish health care system, e.g. 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, e.g. 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. The number of licensed chiropractors increased from 132 in 1996 to 431 in 2002; the corresponding figures for naturopaths are 542 and 785, respectively.

Since 1993, nature-cure medicines have been regulated just like other drugs, i.e. under the Medical Products Act. The popularity of nature-cure medicines in Sweden has increased considerably and they now play an important role within the self-care sector. According to the National Corporation of Swedish Pharmacies, approximately 40% of the Swedish population use nature-cure medicines once or several times a year, and 10% use it daily (National Corporation of Swedish Pharmacies 2004). A survey on living conditions conducted by Statistics Sweden (nd) also indicates the increasing use of natural remedies by the Swedish population. In 1980, approximately 4% of those surveyed said that they had used natural remedies during the previous 2 weeks, whereas the corresponding figure for 1997 was approximately 11%.

6.13 Maternal and child health

Swedish paediatric care covers a wide area of highly specialized hospital, primary and preventive care. It comprises health care services required between the moment of fertilization and the time when the child/adolescent reaches 18 years of age (National Board of Health and Welfare 2002a). The public health perspective and preventive measures are important features within the paediatric field. Preventive maternity care and child care are usually provided at the local health centres (see Section 6.3). There are a large number of subspecialties within paediatric care; inpatient child care is provided at approximately 40 child-care clinics across the country (National Board of Health and Welfare 2002a). All children and young people between the ages of 3 and 19 receive regular

dental care, with an emphasis on preventive care. The dental health of this age group has improved significantly since the 1970s.

During the past 30 years there have been considerable changes with regard to childbirth and in the conditions for delivery procedures. At the same time, the care of premature babies has improved, which has resulted in higher survival rates. The average age at which women have their first baby increased from 24 years in 1973 to 28 years in 2002. In the 1970s, 15% of all women having a first baby were adolescents, but since 1995, the adolescent pregnancy rate has fallen below 5% (and was 3.8% in 2002) (National Board of Health and Welfare 2004g).

Sweden has a long tradition of comprehensive antenatal care, with an attendance rate of virtually 100%; it is provided mainly by the county councils. Maternal care is delivered by midwives to a greater extent than in many other countries. This applies also to delivery care in that births without medical complications are usually attended by midwives.

The average length of stay at the maternity ward after delivery has decreased from 6 days (in 1973) to less than 3 days (in 2002). There has been an increase in the proportion of caesarean sections during the same period, from 5% to 16%, respectively. The proportion of twin deliveries has almost doubled since 1973, and in 2002 the rate was around 15% which, to a great extent, can be explained by an increase in the number of infertility treatments performed. Infants weigh more today than they did 30 years ago, which can be partly explained by the fact that mothers' weights have increased and that the number of pregnant women who smoke has been reduced. Furthermore, the infant survival rate has continuously increased, and the number of infants born with severe congenital anomalies has decreased. This indicates that there has been a constant improvement within the area of maternity and infant care (National Board of Health and Welfare 2004g).

Sweden has an abortion law (SFS 1974:595 with changes in SFS 1995:660) that stipulates free abortion up to the 18th week of pregnancy. After the 18th week, abortion is allowed only when the National Board of Health and Welfare has approved the procedure. The number of abortions in Sweden has increased during the past 15 years (33 365 in 2002). As shown in Table 6.2, the number

Table 6.2 Maternal and child health for selected years (1985–2002)

	1985	1990	1995	2000	2001	2002
Average age of women having their first baby ^a	25.6	25.7	26.8	27.7	27.9	28.0
Perinatal deaths per 1000 births	5.47	4.99	4.34	4.68	4.44	–
Maternal deaths per 100 000 live births	5.08	3.23	3.87	4.42	3.28	–
Abortions per 1000 live births	313	327	304	343	347	348
Abortions per 1000 live births, age <20 years	1 661	1 745	1 960	2 995	3 420	3 834

Source: World Health Organization (2004a).

^a Data from the National Board of Health and Welfare (2004g).

of abortions per 1000 live births declined between 1990 and 1995, but there has been an increase since then, especially among young women.

In Sweden, it is recommended that all children take part in the general free vaccination programme. Since 1996, the programme has included vaccination against diphtheria, tetanus, whooping cough, polio and serious infections caused by the bacterium *Haemophilus influenzae* type b, along with vaccination against measles, mumps and rubella. In Sweden, general vaccination against tuberculosis and hepatitis B is no longer offered. Instead, these diseases are kept under control by selective vaccination, which means that only those children who are at high risk of infection are offered vaccination. The recommendations of the vaccination programme are national, but the county councils (performing vaccinations at child-health centres) and municipalities (performing vaccinations at schools) make decisions on the basis of the recommendations and are responsible for ensuring that the programmes are implemented.

The prevention of sexually transmitted diseases was quite successful during the 1980s and in the first half of the 1990s. After a fall in cases during this period, the number of reported cases of infection with *Chlamydia*, gonorrhoea and syphilis increased during the second half of the 1990s, especially among younger people (see Table 6.3). *Chlamydia* is the most common sexually transmitted infection in Sweden, and the incidence has increased significantly since 1985. The incidence of gonorrhoea has also increased, albeit not in the same dramatic way as *Chlamydia* infection. Reported cases of syphilis, as well as the number of reported new cases of HIV, rose during the early 2000s.

Table 6.3 Cases of sexually transmitted infections, acquired immunodeficiency syndrome and HIV for selected years (1985–2003)

Infection	1985	1990	1995	2000	2001	2002	2003
<i>Chlamydia</i> cases (per 100 000 people) ^a	–	–	–	217.0	250.2	276.5	300.1
Gonorrhoea cases (per 100 000 people) ^a	–	–	–	6.6	5.9	5.6	6.6
Syphilis cases (per 100 000 people)	1.8	1.7	0.8	1.1	0.9	1.4 a	1.9 ^a
Clinically diagnosed AIDS cases (per 100 000 people)	0.4	1.5	2.2	0.6	0.5	0.7	0.6 ^a
New HIV infections reported (per 100 000 people)	3.9	3.9	2.8	2.7	3.1	3.2	4.2 ^a

Source: World Health Organization (2004a).

^a Data from the Swedish Institute for Infectious Disease Control (2004).

6.14 Health care for specific populations

According to Swedish law, all citizens are entitled to proper treatment in case of ill health or injury. All social groups are entitled to the same benefits within the main health system.

7. Principal health care reforms

The Swedish health care sector has undergone several important reforms in the past decades. Changes have been initiated both at national level, through legislation, and locally at county council level. The reforms of the Swedish health care sector have very much been targeted towards addressing specific problems within the health system. For instance, the increase in drug costs brought forward a number of pharmaceutical reforms during the late 1990s and early 2000s. The locally initiated reforms were mainly associated with the introduction of new management systems and new organizational structures. For example, at the end of the 1980s and in the 1990s, efficiency issues came to the fore and, as a consequence, prospective payment schemes, purchasing organizations, and increased possibilities for patients to choose providers were introduced.

An overview of the reforms introduced over several decades shows that the general focus was on equity issues in the 1970s and early 1980s, on cost containment in the late 1980s, on efficiency in the early 1990s, and on structural changes in the delivery and organization of health care in the latter part of the 1990s. Reforms in the late 1990s and early 2000s were in response to renewed concerns about cost containment.

It is important to note that other circumstances, in parallel with reforms, have affected health care, e.g. the recession in the labour market of the early and mid-1990s, and national decisions about tax levels. Ideally, reforms should take into account all relevant health policy goals and should be coordinated. Moreover, a system of following up previously implemented reforms should be established. Several factors make a coordinated reform strategy difficult to achieve. Among the most important of these are changes in the political parties holding power in the different county councils and in the Government. Changes in the Government very much affected Swedish reform-making, and resulted

in a lack of long-term policies during the first half of the 1990s. In addition, the presence of different administrative levels sometimes results in decisions that are not well coordinated.

7.1 Analysis of recent reforms

Distributive justice was the most important goal when successive Social Democrat governments, supplemented by a left-wing majority in Parliament, created the 1982 Health and Medical Services Act (see Table 7.1). The Act stated that the county councils were responsible for health services. The Act meant that financial responsibilities as well as political decisions on resource allocation were decentralized to county council level. Furthermore, the county councils were intended to allocate resources not just according to the needs of the residents. The Act also emphasizes a vision of equal health for all: “The fundamental objectives of health care in Sweden are good health and health care on equal terms for the entire population”. The Act manifested the policies that had been developed in the 1960s and 1970s, namely that health should be considered in relation to other social services and that health care should include preventive responsibilities as well as diagnosis and treatment. The focus on equity in the delivery of services was strongly emphasized in the Act. Special attention was to be given to vulnerable groups, e.g. the elderly, immigrants and early retirees. The Act also stressed that local authorities must work to enable people with physical or mental disabilities to live in a way that corresponds to their needs and to play an active part in the community, e.g. gaining access to public premises.

The decentralization of financial responsibility to the county councils, as specified in the 1982 Health and Medical Services Act, was 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. Before 1980, county council health care was characterized by rapid development and expansion; real resources increased, as did the county councils’ areas of responsibility. Progress was financed through general economic growth in Sweden and increased taxes. An important goal for county councils, as well as the State, was the creation of a health care system reflecting political intentions for good health on equal terms. However, at the beginning of the 1980s, it was evident that county council revenues could no longer increase at the same pace as before. Rapid expansion, along with increased wages, since the 1970s resulted in increasing costs for the health care sector. Cost containment became an important health

care policy issue for the county councils. The expansion also meant that the possibilities for managing health care activities through central county planning became limited. As a result, the principles of global budgeting were introduced. Health care districts received global budgets from their central county council. Many districts subsequently adapted the same principles for managing their departments and primary health care.

Global budgeting, however, was questioned in many county councils because there was uncertainty as to whether the budgets represented a fair allocation among districts. An official national report also established that there was great variation in resource allocation within and among county councils. Global budgeting based on the needs of residents was issued as a solution to variations among county councils and districts. By the end of the 1980s, 14 out of (at the time) 26 county councils had developed a model for global budgeting based on the needs of residents. As this solution created financial “winners” and “losers” among districts, implementation was often postponed; the models were introduced incrementally during several consecutive years. The models varied but were usually based mainly on demographic variables. Some county councils also included indicators on health status, e.g. based on remaining life years and sick leave, or on health as indicated in population surveys (see Section 2.3 for more information about centralization and decentralization).

Liability for the costs of ambulatory health care supplied by public providers and private practitioners linked to regional social insurance offices was transferred from the Swedish Social Insurance Agency to the county councils as a result of the 1985 DAGMAR Reform. Instead of the regional social insurance offices reimbursing ambulatory services according to a fee-for-service system based on number of consultations, the Swedish Social Insurance Agency disbursed general health care grants to the county councils on a per capita basis (with adjustment for social measures). The main motive of the reform was to establish county council control over new private establishments through agreements and control over reimbursements to private providers. The DAGMAR Reform reinforced the county councils’ responsibility for health service provision, as well as the need-based orientation of planning. This reform, intended to consolidate the county councils’ planning authority over ambulatory care visits to physicians, changed the way in which the social insurance fund reimbursed private ambulatory care providers by making the county councils cost-liable. The county councils’ planning capacity was thereby strengthened, as they could now plan annual budgets for ambulatory care services (both primary and specialist care, publicly and privately provided).

The 1992 ÄDEL Reform was the most structural reform of the 1990s. It transferred responsibility for providing long-term care to elderly and disabled people from the county councils to the local municipalities. The main reason

for implementing the ÄDEL Reform was to streamline planning and financial responsibilities for all services for the elderly (including home services and services at nursing homes and elderly residences) in the municipalities. The main objectives were to integrate social and medical care and to provide good living conditions for the elderly. Clear incentives were introduced to reduce the number of elderly patients waiting to be discharged from acute-care hospitals, so-called “bed-blockers”, with the purpose of making capacity available at such hospitals. The local municipalities were required to pay the county councils per diem for care delivered to any patient at hospital when that individual was considered fully medically treated by a doctor. The reform has affected the structure of health care in Sweden substantially. The general view from the National Board of Health and Welfare, which has been in charge of evaluating the reform, is that the introduction of ÄDEL has been quite successful. The elderly no longer stay in hospital when their medical treatment is considered to be complete, and institutional nursing homes and long-term hospitals have been rebuilt as special housing. However, problems remain to be solved, e.g. the lack of physician participation in municipal care, the poor access to nursing homes, and the division of responsibility between the county councils and the municipalities in relation to rehabilitation and home nursing.

Much of the political discussion regarding health care in the 1990s revolved around accessibility, e.g. waiting times for medical attention and for treatment. During the 1980s, there were long waiting lists for certain treatments in the public sector, e.g. hip-joint replacement and cataract surgery. As a consequence, a small number of patients chose to pay themselves for treatment at private clinics rather than waiting for publicly provided care. This resulted in the growth of private providers, especially in the larger cities. In 1992, a National Guarantee of Treatment for patients was introduced, which included 12 elective treatments. The guarantee was the result of agreement at 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 3 months the right to seek treatment elsewhere. The objective was to reduce waiting times for 12 elective hospital treatments with long waiting times. If a patient had to wait more than 3 months for treatment, the patient had the right to seek care at another hospital, either within the patient’s “own” county council or at a hospital under another county council. The waiting times were reduced substantially during the first 2 years. It was found, however, that in practice most patients chose to wait for treatment at “their” hospital, even if the waiting time exceeded 3 months. The guarantee of treatment received some criticism. It focused on “popular” medical problems – mainly elective surgery. In 1993, government research on priorities in health care pointed out that other groups should also be prioritized, e.g. the elderly and

those with mental illnesses. This criticism led to a revision of the guarantee in 1997. A new “National Treatment Guarantee” was implemented on 1 November 2005. The guarantee is based on the “0–7–90–90” rule – meaning instant contact (zero delay) with the health care system, seeing a general practitioner within 7 days, consulting a specialist within 90 days, and waiting no more than 90 days between diagnosis and treatment.

As an addition to the ÄDEL Reform, the Swedish Parliament introduced the Disabled People Reform in 1993. This resulted in the inclusion of two new paragraphs in the Health and Medical Services Act. The county councils’ responsibility to provide rehabilitation and technical aids was emphasized. The municipalities became responsible for people with disabilities (who were below the age of 65 years). In 1994, a new law came into force: namely, the Act Concerning Support and Service for Persons with Certain Functional Impairments. This extended the rights of people with functional impairments (under 65 years of age). The major element of the Act is the right to obtain personal assistance. The municipalities must either appoint an assistant or provide financial support for an assistant. Other rights enshrined in the Act are as follows: consultations and other kinds of support; companion services and short stays outside the home (to relieve the burden on relatives); provision of family homes or homes with special services for children and young people needing to live somewhere other than at their parents’ home; and provision of homes with special services for adults. Help provided under the terms of this Act is free of charge.

The fundamentals for primary health care providers were substantially changed during the mid-1990s. In 1994, a non-socialist coalition government introduced the Family Doctor Act and the Act on Freedom to Establish Private Practice (1994). However, in 1994, the Social Democrats returned to power, and, in June 1995, these two laws were withdrawn before they were fully implemented. Even though they were withdrawn, these laws fostered some reform in the primary health care sector. Several counties had already started to make changes in their delivery of primary health care as a result of the Family Doctor Act. This Act allowed the county councils to organize outpatient primary health care in such a way that all residents within the county council were able to choose a family doctor (general practitioner). Freedom of choice was extended to cover the services of private general practitioners who did not have contracts with the county councils. Traditional primary health care, which consisted of collaboration with district nurses within geographically determined responsibility areas, was replaced with the family doctor system. Payments from the county councils were to be partly based on a monthly fixed fee (capitation) per listed individual, and partly on a fee-for-service basis. Thus, the family doctors were given financial incentives to attract patients. The main

objective of the reform was to improve accessibility and continuity in primary care. The Act on Freedom to Establish Private Practice increased the possibilities for establishing private practice by taking away the county councils' ability to regulate the number, and reimbursement, of private practitioners. The county councils were supposed to have implemented the family doctor reform by the end of 1995, but, in June 1995, the new Social Democrat Government abolished both the Family Doctor Act and the Act on Freedom to Establish Private Practice. Among other things, the Family Doctor Act, together with the Act on Freedom to Establish Private Practice, resulted in increased privatization of primary health care in some counties (Blomqvist 2004).

In 1995, the responsibility of the local municipalities was extended further through the Psychiatric Reform, which was similar to the ÄDEL Reform. Local municipalities became financially responsible for patients after they have been fully treated. Thus, after patients have had 3 months of consecutive inpatient psychiatric treatment, the local municipalities must provide housing, occupational services and some rehabilitation services. The objective of the reform was to improve quality of life for psychiatric patients, through good housing and daily activities. Studies indicate that one positive effect of the reform is that the quality of life for these patients actually has improved as a result (Arvidsson 2004; Lamborn and Johansson 1999). However, one major problem, albeit not due to the reform itself, is that the number of individuals seeking early retirement due to psychiatric illness increased during the 1990s. As the intention of the reform was to create early individual rehabilitation for individuals as soon as they fall ill, this development actually goes against the intentions of the reform. In 2003, the Government appointed a national coordinator for psychiatry in order to improve the quality of care for people with mental illnesses or psychiatric disabilities.

The Law of Supervision, introduced in 1997, states that, for all health care providers, a person responsible for reporting on any incidents that occur in connection with medical treatments, etc. must be appointed. This Law abolished the 1991 Senior Chief Physician Reform, which stated that senior chief physicians must be medical specialists. This reform highlighted the responsibility of medical care and health care management for reducing medical errors and improving the quality of health care. The county councils appointed senior chief physicians where considered necessary and such appointments, therefore, were at the discretion of each county council. The Law of Supervision was abolished in 1999.

According to the legislation (Health and Medical Services Act), health care services should follow the principles of quality assurance. Systems for quality assurance were stipulated in the SOSFS 1996:24. In 1997, statutes and rules for quality registers, i.e. quality systems, in the health and medical services

were established. The regulation was a natural development of the expansion in the national quality registers during the 1990s, and the increasing demands for patient-focused care, efficiency, monitoring and quality. These rules also give the National Board of Health and Welfare an opportunity to supervise the system. The regulation stipulates that all activities must be subject to systematic inspections – a requirement that applies to all levels of the health care system and all health care professionals. The quality registers are one mechanism for quality assurance in the Swedish health care system. Quality registers are jointly funded by the National Board of Health and Welfare and the Federation of County Councils, but a substantial part of the costs for maintaining them is covered by individual county councils.

The National Guarantee of Medical Treatment of 1992 was revised in 1997. In the revised version, accessibility for health care seeking in primary and specialist care was regulated. Patients should receive care from a nurse practitioner at the health centre on the same day. An appointment to see a physician must be offered within 7 days. When the patient is referred for specialist care, an appointment should be offered within 3 months, and when the diagnosis is unclear, an appointment to see a specialist must be offered within a month. In cases in which specialist care cannot be offered within these timeframes, the patient is free to seek care in another county council. In addition to implementing the national guarantee, county councils can also formulate their own treatment guarantees.

In 1997, an addition was made to the Health and Medical Services Act regarding priorities in health care. The Law regulates how patients should be prioritized according to the type of medical problem. Those patients in greatest need of care should have priority over other patients. National guidelines on which patients are regarded as being in greater need are included in the Law. The ethical basis for these guidelines consists of three principles: the principle of human dignity; the principle of need and solidarity; and the principle of cost-effectiveness, in order of priority. These three basic principles have been converted into four priority groups, i.e. into medical conditions and patients' groups with different needs for health and medical care. The first group includes, for example, care of patients with life-threatening diseases, palliative care and care for people with chronic diseases. The second group includes prevention and rehabilitation. In the third group, care of patients with non-acute and non-chronic diseases is included. Care that is needed for reasons other than illness or injury forms the fourth group, e.g. cosmetic surgery, and, according to Government Bill 1996/97:60, treatments in this group should not be financed by public means (SOU 2001:8).

At the end of the 1990s, drug reform was implemented in two stages. The first stage was introduced in June 1997, when a new National Drug Benefit

Scheme came into force. This regulated co-payments for pharmaceuticals for patients, and was separated from the cost ceiling for medical treatments. The ceiling limits a patient's out-of-pocket payments to SKr 1800 during a 12-month period, but most over-the-counter products are not covered. However, drugs for birth control, products for patients who have recently had surgery of the colon or ileum, and articles needed for the intake of medicines are covered. In 1997, county councils received the right to buy pharmaceuticals for inpatient care directly from pharmaceutical companies. In addition, the law on pharmaceutical committees was introduced, requiring the appointment of at least one committee in every county council. Moreover, in the same year, a law was introduced stating that registers on prescriptions, containing patients' personal security numbers, should be kept and run by the National Corporation of Swedish Pharmacies. Finally, again in 1997, the National Board of Health and Welfare was given the responsibility of keeping a record of prescribers.

The second stage of this drug reform took place in 1998. The county councils were given full responsibility over the costs of drug treatments. This responsibility was transferred gradually during a transition period. One major reason for this reform was the open third-party payment system, which was considered to contribute to the need for cost containment. Under this system, health care providers were responsible for the costs of health care, but not for outpatient drug treatment, which meant that the prescribing physician, whether public or private, lacked any direct incentives to keep drug costs under control. The aim of the reform was for the county councils to take on full responsibility for pharmaceuticals, after a transition period of 4 years. The fact that county councils gained responsibility over pharmaceuticals has meant that they pay close attention to current expenditures and influence prescriptions. The reform has given county councils direct incentives to increase prescriber knowledge about pharmaceutical costs and consumption patterns. Committees have been formed in every county council, and, in some counties, prescribing advisers inform prescribers as to pharmaceutical usage and costs.

The 1997 law on supervision was abolished in 1999, but its content is included in the Law on Professional Activities in the Health Care Sector, which states that all publicly financed health care provision must be accountable to the National Board of Health and Welfare. Health care providers are obliged to report incidents that occur in connection with medical treatments, and are required to have mechanisms in place for the efficient reporting of such events.

From 1 January 1999, additional paragraphs were added to the 1982 Health and Medical Services Act to increase county councils' obligations towards patients. Patients' rights in the health care system were increased. Among other things, patients have the right to choose their primary care physician. This right

is not restricted to a certain geographical area. The patient also has the right to receive individually tailored information about his/her medical condition, examinations, care and treatment. In addition, the patient has increased influence over his/her treatment. In those cases in which several treatment options are available, the patient can choose which one he/she prefers, if the costs do not differ to a great extent. If the patient suffers from a serious medical condition that is difficult to assess, the patient can obtain a second opinion anywhere in the country.

In the late 1990s, mergers of hospitals and county councils took place. The objective of these mergers was to restrain costs and increase efficiency. Two regions – Skåne and Västra Götaland – were formed in 1999. For a trial period until 2006, these two regions have been given responsibility over some tasks that used to be managed by central government, e.g. the business sector, culture, roads and railways, in addition to the principal task of providing health and medical care within their respective regions.

A dental care reform was introduced in 1999, when fixed and nominal subsidies for different types of services, together with free pricing for providers, were implemented. Previously, user charges were based on a fixed percentage, depending on the level of expenditure, and prices were regulated by a national tariff. Already during the first year with free pricing, providers had already raised their fees by 18% on average (National Social Insurance Board 2000). This additional cost all had to be borne by individual patients.

Although the Family Doctor Act and the Act on Freedom to Establish Private Practice, introduced in 1994, were withdrawn in 1995, market-led orientation in the health care market persisted. In county councils with non-socialist majorities, in particular, the development of private health care provision has been encouraged. The first emergency hospital to be privately owned was the St Göran Hospital in Stockholm, which was sold in 2000 (Palme et al. 2002). However, this trend was disrupted in the same year that the Social Democrat Government adopted new temporary legislation prohibiting the sale of emergency hospitals to commercial for-profit investors. This “Stop Law” was implemented in 2001.

In July 2002, a new piece of dental care reform was introduced. High-cost protection schemes for elderly patients above 64 years of age were implemented. However, charges for dental care can still be high. Some 60% of total expenditure for dental care is paid directly by patients.

In October 2002, the Pharmaceutical Benefits Reform came into effect. Since October 2002, a new authority, LFN, has had the responsibility for deciding if a medicine or specific product should be subsidized, and then, through negotiations with the manufacturers, agreeing a price. It is primarily the

cost-effectiveness of various products that is assessed rather than the medical indications. However, the Board can make exceptions and decide that a drug should qualify for reimbursement for a certain indication or for a subgroup of patients. Furthermore, from October 2002, a prescribed drug that qualifies for a subsidy has to be exchanged for the cheapest comparable generic available at the pharmacy.

No explicit reforms were implemented during 2003 and 2004. Debate regarding the Swedish health care system during the early twenty-first century has, to a great extent, focused on the need for coordination of care, partly driven by county council cost containment. Since 2003, specialist and emergency care has tended to be concentrated within geographical areas, e.g. smaller county councils have started to cooperate regarding specialist care in larger regions, although the process is rather slow. The other aspect refers to coordination of different levels of care, i.e. hospital care, primary care, institutional care and home-based care, with respect to the provision of services to the elderly and patients with multiple diagnoses. Furthermore, the division of responsibility for the provision of health care services – between the central government, the county councils and the municipalities – and the strengthening of central control have been the subject of discussion. In 2003, the Parliamentary Committee on Public Sector Responsibilities was formed, with the purpose of analysing the current separation of responsibilities. The Committee is expected to deliver proposals for change no later than February 2007.

7.2 Future developments

The trends that have dominated the 1990s and early 2000s are expected to continue into the twenty-first century. These include a concentration of emergency hospitals and highly specialized care, a shift from hospital care to primary and home-based care, a strengthening of primary care, and continued efforts to improve the coordination of care – especially for the elderly and the chronically ill (Swedish Association of Local Authorities and Regions and Federation of Swedish County Councils 2004).

There is broad support for public finance and universal access to services among the political parties represented in the Parliament, even though support for private provision and greater use of supplemental insurance and user charges exists among the non-socialist parties. Physicians' and nurses' unions have also expressed a positive attitude towards private providers. Generally, a higher proportion of private providers can be seen in county councils with a high proportion of conservative voters. At national level, the Social

Table 7.1 Major health care reforms and policy measures

Year	Reform	Purpose
1982	Health and Medical Services Act	To make county councils responsible for the financing and provision of health care services
1985	DAGMAR Reform	To make county councils cost liable for ambulatory health care provided by public and private providers
1992	ÄDEL Reform	To make municipalities responsible for providing long-term health care and social welfare services to the elderly and those with disabilities
1992	National Guarantee of Treatment	To introduce limited waiting times for treatments (revised in 1997)
1993/94	Disabled People Reform	To extend the rights of people with functional impairments
1994	Family Doctor Act	To introduce the possibility of residents being able to choose a family doctor
1994	Act on Freedom of Private Practices	To increase the possibilities for establishing private practices
1995	Abolishment of Family Doctor Act and Act on Freedom on Establishing Private Practices	To limit opportunities for the establishment of private practices and for citizens being able to choose a family doctor
1995	Psychiatric Reform	To make municipalities responsible for psychiatric patients whose treatment had been completed
1997	Law of Supervision	To introduce a supervisor for every health care provider (abolished in 1999).
1997	Quality systems	To introduce general rules for addressing quality systems in health care
1997	Guarantee of Medical Treatment	To increase access to health care in the primary and specialized care sectors
1997	Law on Priorities	To introduce priorities in health care
1997	Drug Reform	National Drug Benefit Scheme
1998	Drug Reform	To make county councils financially responsible for prescription drugs
1999	Law on Professional Activities in the Health Care Sector	To implement a report system concerning all health care activities/provision to the National Board of Health and Welfare
1999	Patients' Rights Reform	To increase county councils' obligations regarding patients' rights in the health care system
1999	Dental Care Reform	To introduce fixed subsidies for different types of services and free pricing for providers.
2001	Stop Law	To stop the sale of emergency hospitals to commercial for-profit companies. The restriction applied from 31 December 2002.
2002	Dental Care Reform	To implement a new high-cost protection scheme regarding denture treatment for patients above 64 years of age.
2002	New Pharmaceutical Benefits Reform	To establish a new authority, the Pharmaceutical Benefits Board, with responsibility for determining subsidies on pharmaceuticals.

Democrat (minority) Government seems eager to defend public hospitals. Although the Swedish health care system is characterized by a strong degree of decentralization, and the local authorities are responsible for the provision of care, there has been a strengthening of national control over the past few years. One example is the temporary law (implemented by the Social Democrat Government in 2001) preventing county councils from transferring the operation of emergency hospitals to private for-profit investors. This Law disrupted further plans by the County Council of Stockholm and Region Skåne, which, at the time, were run by non-socialist majorities, to transfer the operation of major hospitals to private for-profit companies. In June 2005, a new law regulating private providers in the hospital sector was adopted by the Swedish Parliament. According to amendments to the Health and Medical Services Act (1982:763), each county council must run at least one hospital itself, within its own area. Furthermore, county councils are allowed to entrust the operation of regional hospitals or regional clinics to any other party. If a county council transfers the operation of other hospitals to another party, the terms of the agreement must stipulate that the operation cannot be run for the purpose of generating profit for the contractor, and that the care is exclusively financed by public funds and care fees. These legislative amendments came into force on 1 January 2006.

Further indications suggest that previous national policies of decentralization have been replaced by the reverse trend. For example, national “action plans”, supported by additional government grants, have been implemented to strengthen available resources and to encourage coordination between the care of the elderly, psychiatric care and primary care. The Parliamentary Committee on Public Sector Responsibilities intends to identify the strengths and weaknesses of the present organization and delivery system and will present proposals for change (SOU 2003:123). The Committee is expected to present its results no later than February 2007.

8. Assessment of the health system

8.1 The stated objectives of the health system

The aim of Swedish health and medical care is for the entire population to have equal access to good care services. Care should be provided with respect for the equality of all human beings, the integrity of every individual, and according to need. Furthermore, care should be subjected to democratic control and funded by society. People must also have the opportunity to influence and participate in health care.

According to the Health and Medical Services Act of 1982, the county councils have the responsibility to ensure that all citizens have equal access to high-quality health care. The Social Services Act of 1980 and the Act Concerning Support and Service for Persons with Certain Functional Impairments of 1993 regulate the municipalities' responsibility to provide public services and to provide support, at all stages of life, for the elderly and people with disabilities.

8.2 The distribution of the health system's costs and benefits across the population

The Swedish health care system is financed by taxation. Both the county councils and the municipalities levy proportional income taxes on the population. There are also national income taxes and indirect taxes, which constitute the basis for the county councils' and municipalities' second most important source of finance, i.e. state grants.

Resources within the health system should be distributed according to need. On the basis of the three basic principles that apply to all health and medical care in Sweden, i.e. the principle of human dignity, the principle of need and solidarity, and the principle of cost-effectiveness, four patient groups with different needs for health and medical care have been specified. The first group includes, for example, care for patients with life-threatening conditions, palliative care and care for people with chronic diseases (SOU 2001:8).

Since income and need are not equally distributed across the country, the Government reallocates resources across municipalities and county councils. State grants are partly based on a formula that reallocates resources with the intention of giving different local governments opportunities to maintain similar standards irrespective of differences in average income and/or need. The formula, introduced in 1996, accounts for differences in average health care costs per individual in the general population divided by numerous factors, such as sex, age, civil status, occupation, income, housing and groups with a high consumption of health care resources (SOU 1996:163). This way of reallocating resources has created “winners” and “losers”, as a small number of county councils and municipalities became net contributors, while the others became net recipients. Hence, the new formula created increased tensions, firstly between the “losers” and the Government, and secondly across local government bodies. To facilitate adaptation to these negative effects, the formula is being implemented over an 8-year period. Nonetheless, tensions have grown over the years, and political debates about the compensation scheme and its effects have become a problem for the Government.

With the exception of one study carried out in Region Skåne (Lithman et al. 2000), it is difficult to link health care expenditures to specific population or patient groups, based on available statistics. However, it is fair to assume that the results of Lithman et al. (2000) are also valid for the rest of the country. This study revealed that a very small proportion of the population accounts for a large proportion of all health care services. Approximately 20% of the population consume 80% of all available resources, and 3.5% account for 50% of all expenditure. Care for the elderly, care for those with chronic diseases and palliative care account for a very large proportion of all health care expenditure.

Between 1993 and 2003, the average length of hospital stay decreased by 1.9 days. Care for the elderly accounts for a significant part of this reduction, obtained primarily as a result of the 1992 ÄDEL Reform, which transferred responsibility for the elderly from the county councils to the municipalities. However, this does not mean that the reform led to a decrease in resources for the elderly. In fact, the elderly receive a larger proportion of the available resources today than they did before the ÄDEL Reform. In 2002, people aged

85 years and over accounted for 9.4% of all doctors' visits; the comparable figure for 1992 was 6.2%. Among those aged up to 44 years, the opposite scenario has taken place: this group accounted for 38.7% of all doctors' visits in 1992, and 31.7% in 2002.

In Sweden, the debate concerning equity in the distribution of health care services has focused less on the distribution between different socioeconomic groups than on the distribution between the young and the elderly. With regard to equity among socioeconomic groups, one study indicates that the number of doctors' visits is unequally distributed, benefiting those with high incomes (van Doorslaer et al. 2000). This differs from the pattern in many other countries, where a higher proportion of visits to specialists among those with high incomes is balanced by a higher proportion of visits to general practitioners among those with lower incomes. One possible explanation is the relatively high proportion of specialists and hospital-based physicians in Sweden (Anell 2004). The Swedish Government is explicitly targeting these issues by strengthening primary care, improving cooperation across different levels of care and improving care for the elderly, those with disabilities and those with mental illnesses. As a result of an action plan adopted in 2000, the municipalities and county councils received extra funding (SKr 9 billion) between 2001 and 2004 for the improvement of health care.

Policies relating to user charges are aimed at protecting individuals from high costs, and are intended to prevent excessive use of health care services. These two objectives have proved difficult to combine. For those categories of patients with large health care consumption, e.g. the chronically ill, user charges do not prevent excessive use of services once patients have reached the high-cost protection level for outpatient care and pharmaceuticals. For each new 12-month period, however, patients may suffer financially because of user charges, and thus their use of services may be affected. The amount of private expenditure on health care as a proportion of total expenditure on health care has increased since the beginning of the 1990s. Health care with a high level of patient co-payments (e.g. drugs) has increased, while health care with a low degree of patient co-payments (e.g. inpatient care) has decreased. One factor explaining this development is the 1992 ÅDEL Reform, which transferred the responsibility for patients who were fully medically treated to the municipalities and thereby brought incentives for the county councils to reduce the average length of stay in hospital. The current proportion of total expenditure on health is among the highest in Europe, but there are no planned reforms of the user-charges system (Øvretveit 2003). Studies in the late 1990s showed that dental care, with its significant user charges and limited protection against high costs, is unequally distributed across socioeconomic groups. Low-income households are also less likely to use health care and pharmaceutical services because of

financial constraints, but compared to the use of dental services, the differences are smaller (National Board of Health and Welfare 2002b).

8.3 Efficiency of resource allocation in health care

Swedish health care has a long-standing, strong tradition of hospital-based care. Compared to other countries, Sweden has a large proportion of the physicians working as specialists and working in hospitals. Already in the 1970s, efforts were made towards strengthening the primary care sector and improving cooperation between hospitals and primary care units. Nonetheless, the health care sector can be described as fragmented, and coordination between different levels of care is not sufficient. However, there are substantial regional differences concerning the availability and performance of the primary care sector and the cooperation between different levels of care (Jönsson et al. 2004). The structural changes taking place today, i.e. the concentration of emergency hospitals and highly specialized care, the shift from hospital care to primary care and home-based care, and the strengthening of primary care, presents challenges for the efficient allocation of resources. It is likely that a re-allocation of physicians from hospitals to primary care units is needed. Furthermore, the existing efforts designed to improve the coordination of care must continue.

Coordination between different levels of care is especially important with regard to care for the chronically ill and the elderly. Currently, Sweden has one of the world's oldest populations. This "ageing society" poses difficult problems for the future, as a decreasing proportion of the population (i.e. those of "productive" age) have to provide for the growing elderly proportion of the population. The number of health care personnel needed to supply services to the elderly and to people with disabilities is expected to be 200 000 by the year 2015 (National Board of Health and Welfare 2003d). Furthermore, as the labour force diminishes in size, economic growth may decline, and the tax base – which has to finance health and medical services – may be detrimentally affected.

While it is certain that the ageing population will pose problems concerning the labour force, it is not clear in what way the proportional increase in the elderly population will affect the demand for health care services. As medical technology improves, people are likely to stay healthy – or at least avoid being ill – for longer. Thus, as people get older, they will not necessarily need a larger proportion of the available health care resources for a longer period; rather, their utilization of health care is likely to be postponed to a later stage of their life ("postponement of morbidity"). Another possibility is that people's periods of

ill health will be compressed, i.e. individuals will be ill for a shorter period of time (“compression of morbidity”). A third alternative is that improved health amongst young people and lower mortality rates for many diseases will enable people to live longer and thus contract more diseases later in life. This linear theory implies that people will be more ill and require more health care services as they become older (“expansion of morbidity”) (SOU 2000:7).

8.4 Technical efficiency in the production of health care

There has been an intense debate regarding productivity in the health care sector, based on the increase in expenditure during the past 10 years. Health care expenditure (measured at fixed prices) increased by 13% in the period 1993–2002 (National Board of Health and Welfare 2004h). After 1996, in particular, there was a clear increase in expenditure (Anell and Hjalte 2004).

Productivity gains were made in the first half of the 1990s, partly as a result of local-government reforms involving a purchaser–provider split and reformed payment systems. Furthermore, the ÄDEL Reform transferred responsibility for fully medically treated patients to the municipalities, which brought incentives for the county councils to reduce the average length of stay in hospital. The average length of stay was reduced from 7.9 days in 1993 to 6.0 days in 2003. The decreasing number of beds together with the reduction in the average length of stay implies that both the hospitalization rate and the rate of patient turnover increased. In addition, the county councils’ initiatives to contain costs, from the mid-1990s up to 1996, were quite effective until 1996 (Andersen et al. 2001).

From 1996 onwards, the trend looks different. In terms of human resources, the number of physicians increased by 10%, and the number of nurses by 13%, between 1996 and 2002, following the rise in costs. However, there seems to be no corresponding increase in output. The number of doctors’ visits has remained at a constant level (Jönsson et al. 2004). There have been several attempts to explain this situation in the Swedish health care sector. Fölster et al. (2003) suggest that this can be explained primarily by the inefficient use of the available human resources. According to the authors, too much staff time is devoted to administration. Suggestions for improvement include introducing a national information technology system within Swedish health care.

Efforts intended to make the best use of the available resources include substitution policies, which apply to medical and dental services as well as to pharmaceuticals. District nurses play an important role in the health system,

as they often represent the first point of contact with health services. Nurses have their own consulting room. They are also very much involved in home care and regularly make home visits, especially to the elderly. District nurses and midwives have limited rights for prescribing pharmaceuticals (mainly some antibiotics and contraceptives), although they act under the supervision of physicians. Similarly, dental assistants perform examinations, etc. that do not have to be carried out by a dentist. Generic substitution for prescribed drugs was introduced in 2002. Pharmacies were given the responsibility of exchanging prescribed drugs which qualify for subsidy, for the cheapest comparable generic drugs available. The introduction of generic substitution, together with the patent expiry for four of the most frequently sold drugs, led to a marked slow-down in the rate of increase in pharmaceutical expenditure in 2003 and 2004.

8.5 Accountability of payers and providers

The responsibility for both financing and providing health care services is integrated to a high degree in the Swedish health care system. Thus, it is county council accountability that is assessed with regard to health and medical services. Although the stated objective of Swedish health and medical care is for the entire population to have equal access to good care services, there is no legislation supporting the individual's right to obtain such services. The 1982 Health and Medical Services Act defines the county council's responsibility to provide high quality health care rather than the citizen's right to access it. There is no legal authority for citizens to turn to if the county councils fail to provide care at the appropriate level and time. The citizens' main chance to express their opinions is in the county council elections, held every fourth year.

One example that illustrates the rather weak position of individual patients in Swedish health care is the 1992 treatment guarantee (revised in 1997). The current guarantee implies that patients in need of a medical examination are legally entitled to such services within 7 days, and that patients with a referral to a specialist should wait no more than 90 days. If the county council of a particular patient cannot offer treatment within this timeframe, however, the only right that the patient has is to choose another provider, e.g. under a nearby county council (Swedish Federation of County Councils 2003b). But a county council, on the other hand, is not obliged to offer care to people not residing in its geographical area. If there are also long waiting times under neighbouring county councils, patients still have to wait for care. In practice, then, the treatment guarantee is not an individual right. Furthermore, patients seem rather unwilling to seek care outside the area in where they reside. Very

few choose to seek treatment outside their “own” county council area, although, for certain treatments, there are considerable differences in waiting time for different hospitals (Anell, 2004; Swedish Federation of County Councils web page, 2005-03-22).

With regard to care for the elderly and people with disabilities, the legislation is differently formulated. Both the Social Services Act and the Act Concerning Support and Service for Persons with Certain Functional Impairments define the individual’s right to receive support (such as personal assistance and help with daily activities) from the municipalities. An individual can apply for support under these laws, and has the right to appeal to a higher authority, i.e. the County Administrative Court, if his/her request of assistance has been partly or fully refused by the social services.

There are different bodies sharing the task of safeguarding patients’ interests regarding receipt of adequate and safe health care. The Medical Products Committees Act requires every county council and municipality to have a patients’ committee, which is intended to support and help individual patients and contribute to quality improvement in the health care system. If a patient, as a result of treatment, suffers an injury, contracts a disease or is exposed to risk, the provider must report the incident to the National Board of Health and Welfare. Should faults or negligence in treatment be attributable to members of staff, the incident can be referred to HSAN. The Board can enforce disciplinary measures such as a warning, or can limit – or even withdraw – a health care professional’s right to practise.

Every institution providing health services has a legal obligation, under the terms of the Patient Injuries Act, to provide compensation for injuries that occur in the course of their services. The institutions are insured to meet any demands for financial compensation from patients who have suffered such injury.

8.6 The contribution of the health system to health improvement

By international standards, the health status of the Swedish population is very good. Health programmes designed to prevent diseases and injuries have been successful in the areas of diseases of the circulatory system and cancer. In addition, accident prevention has been successful in Sweden. Together with Norway and the United Kingdom, Sweden has the world’s lowest rate of mortality due to traffic accidents. In 2002, the disability-adjusted life expectancy in Sweden was 73.3 years, which compares with an estimated life expectancy of 80.4 years (see Table 1.5). One of the major factors behind the

high life expectancy in Sweden is the significant reduction in mortality due to diseases of the circulatory system. Furthermore, mortality from cancer has been reduced by slightly more than 14% in the last 20 years. However, diseases of the circulatory system and tumours were still the two main causes of death in 2002 (see Table 1.4).

Public health efforts to reduce the harmful effects of alcohol have been successful. Alcohol-related mortality has decreased by one-third since the beginning of the 1980s. Health promotion interventions in Sweden include population-based screening programmes, e.g. for breast and cervical cancers, and an extensive infrastructure, e.g. clinics for mothers and children, youth clinics and health care initiatives at primary school level. These interventions have significantly improved the indicators of health for women, children and young people.

In addition, some indicators on quality of life and daily functioning show a positive contribution by the health care system. Examples include a reduction in the proportion of the elderly with severely impaired vision, and improvements in daily functioning among survivors of strokes.

However, there are some worrying tendencies considering self-reported mental ill health, alcohol problems and overweight. The proportion of the population reporting suffering from worry, fear or anxiety has increased within all age groups, and the increase is most prominent in urban areas and among single mothers. Alcohol-related mortality is expected to rise, because of the increase in the consumption of alcohol. Overweight and obesity have become more common in all socioeconomic groups since the beginning of the 1980s, especially among young adults, although, from an international perspective, the level of obesity in Sweden is relatively low (National Board of Health and Welfare, 2002a; 2004a; 2005; Cutler, Glaeser and Shapiro 2003).

9. Conclusions

The Swedish health system is predominantly funded through taxation. There are three independent government levels involved in health care, i.e. the national government, the county councils and the municipalities. All three levels play an important role in the welfare system and are represented by directly elected bodies that have the right to levy taxes on the population to finance their activities. Overall goals and policies are set at national level by the Ministry of Health and Social Affairs, while both the financing and provision of health care services are primarily the responsibility of the county councils. According to the three basic principles for public health and medical care – the principle of human dignity, the principle of need and solidarity, and the principle of cost-effectiveness – care should be provided on equal terms, according to need, and it should be managed democratically and financed on the basis of solidarity.

The Swedish health care sector has undergone several important reforms in the past few decades. During the 1970s and early 1980s, the focus was on issues of equity; in the late 1980s, the emphasis was on cost containment; in the early 1990s, the focus was on efficiency; and in the latter part of the 1990s, the emphasis was on structural changes in the delivery and organization of health care. Reforms in the early 2000s were in response to renewed concerns about cost containment. Generally, national reforms that have had an impact on the health care system have focused on three broad areas: the responsibility for provision of health care services; priorities and patients' rights in health care; and cost containment.

The 1982 Health and Medical Services Act emphasized a vision of equal health for all. The Act stated that the county councils were responsible for the provision of health care services and both financial responsibilities and political resource-allocation decisions were decentralized to county council level. The

1985 DAGMAR Reform transferred the responsibility for costs of both public and private ambulatory health care from the Swedish Social Insurance Agency to the county councils. The main objective of the reform was to establish county council control over new private establishments. As a result, the county councils' planning capacity was strengthened as they became cost-liable. County councils could actually plan annual budgets for both publicly and privately provided primary and specialist care services. The purpose of the 1992 ÄDEL Reform, which was the most important structural reform of the 1990s, was to merge the planning and financial responsibilities for the elderly and for people with disabilities by transferring the responsibility for providing long-term care to these patients from the county councils to the local municipalities. The reform has affected the health care structure in Sweden substantially. Similarly, the 1995 Psychiatric Reform, aimed at improving the quality of life for psychiatric patients, made the municipalities financially responsible for such patients when they no longer require hospital care, i.e. when they are fully medically treated. Following the 1998 Drug Reform, the county councils were given full responsibility for the costs of prescribed pharmaceuticals. The reform has given county councils direct incentives to increase prescriber knowledge about pharmaceutical costs and existing consumption patterns.

With regard to priorities, the National Guarantee of Treatment of 1992 was intended to speed up access to 12 elective hospital treatments with long waiting times. Patients were given the right to seek care outside their own county council if waiting times exceeded 3 months. As a consequence, the waiting times were reduced substantially during the first 2 years. However, in practice, most patients chose to wait for treatment at "their" hospital, even if the waiting time did exceed 3 months. The guarantee of treatment was criticized for focusing on "popular" medical problems, and the criticism led to a revision of the guarantee.

In the Revised Guarantee of Medical Treatment of 1997, access to primary and specialist health care services was regulated. Furthermore, in 1997, an addition was made to the Health and Medical Services Act regarding "priorities in health care". The law stipulates that those patients who have the greatest need should have priority over other patients. National guidelines are included in the law, and they state which types of patients are regarded as having greater need than others. The three ethical principles, i.e. the principle of human dignity, the principle of need and solidarity and the principle of cost-effectiveness, have been converted into four priority groups, i.e. categories of patients with different needs for health and medical care. Finally, in 1999, additional paragraphs regarding patients' rights were added to the Health and Medical Services Act, increasing county councils' obligations towards patients. For example, the patient was given the right to choose his/her primary care physician without any geographical

restrictions, became entitled to detailed information about his/her medical condition, and was given the right to choose between treatment options.

With regard to patients' fees, in 1997, the National Drug Benefit Scheme, which regulates co-payments on pharmaceuticals for patients, was separated from the cost ceiling for medical treatments. The ceiling limits the patient's out-of-pocket payments to SKr 1800 during a 12-month period, but most over-the-counter products are not covered. In the same year, county councils were given the right to buy pharmaceuticals for inpatient care directly from pharmaceutical companies. In addition, a law requiring the appointment of at least one committee in every county council was introduced. Following the law on pharmaceutical committees and the 1998 drug reform, committees have been formed in every county council, and, in most counties, prescribing advisers inform prescribers of the usage and cost of the pharmaceuticals. In October 2002, a new Pharmaceutical Benefits Reform came into effect. A new authority, LFN, has the responsibility of deciding if a medicine or specific product should be subsidized and then, through negotiations with the manufacturers, agreeing on its price. It is primarily the cost-effectiveness of various products that is assessed. Furthermore, from October 2002, a prescribed drug, which qualifies for subsidy, has to be exchanged for the cheapest comparable generic version available at the pharmacy. Perhaps the most important reform regarding patients' fees was the 1999 Dental Care Reform, which led to the implementation of fixed and nominal subsidies for different types of services, together with free pricing for providers. Previously, user charges were based on a fixed percentage according to the level of expenditure, and prices were regulated by means of a national tariff. Providers raised their fees by 18%, on average, during the first year after the reform, and this additional cost had to be borne by individual patients (National Social Insurance Board 2000). In the 2002 New Dental Care Reform, high-cost protection schemes for elderly patients above 64 years of age were introduced. However, charges for dental care can still be high, and about 60% of the total expenditure for dental care is paid direct by patients.

Reforms in Swedish health care have tended to focus on one objective at a time, reflecting the most urgent problem. Every new reform carries a set of new problems, generating demand for additional change. By the time reforms are implemented, new problems emerge relating to objectives that were not considered, leading to the need for additional changes. For example, the introduction of the ÅDEL Reform can be seen as having been rather successful. Elderly patients no longer stay in hospital when they are considered to be fully medically treated, and institutional nursing homes and long-term hospitals have been rebuilt as special housing. However, the shift from hospital to primary and institutional care has brought problems such as a lack of skilled personnel in

the municipal sector. Despite several decades of important reforms, numerous challenges for the Swedish health care system remain, as outlined below.

- There is a need for integration between hospital care, primary care and institutional care, especially in the provision of services for the elderly, and for those with disabilities or mental illnesses. In addition, there is a need to strengthen primary care and home-based care and to find a way of tackling the shortage of skilled personnel in the municipal sector.
- Cost containment in the Swedish health care system remains an important challenge, as it is for many other countries.
- The difficulties in defining division of responsibility for health care provision between central government, county councils and municipalities need to be tackled.
- Effective interventions are needed for tackling increasing social inequality in health care in Sweden, especially with regard to dental services.
- Patients need increased choice of provider in reality, not just in theory.

The health status of the Swedish population is one of the best in the world. The main strengths of the Swedish system include the following: provision of health care services to everybody on the basis of need; democratic control and local accountability; control over total expenditures; and effective management of clinical activities. It is important to address the remaining challenges in order to achieve equity and efficiency – the principal objectives of the Swedish health system.

10. Appendices

10.1 References

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10.2 Useful web sites

Church of Sweden [Svenska kyrkan]: <http://www.svenskakyrkan.se>

County Councils' Mutual Insurance Company [Landstingens Ömsesidiga Försäkringsbolag]: <http://www.lof-forsakring.com>

Federation of Swedish County Councils [Landstingsförbundet] and Swedish Association of Local Authorities [Svenska Kommunförbundet]: <http://www.skl.se>

Government Offices of Sweden [Regeringskansliet]: <http://www.regeringen.se>

Medical Responsibility Board [Hälsa och sjukvårdens ansvarsnämnd]: <http://www.hsan.se>

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

National Corporation of Swedish Pharmacies [Apoteket AB]: <http://www.apoteket.se>

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

Pharmaceutical Benefits Board [Läkemedelsförmånsnämnden]: <http://www.lfn.se>

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

Swedish Association of Health Professionals [Vårdförbundet]: <http://www.vardforbundet.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 Hälsa- och sjukvårdsekonomi]: <http://www.ihe.se>

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

Swedish Medical Association [Sveriges Läkarförbund]: <http://www.slf.se>

Swedish Municipal Workers' Union [Kommunal]: <http://www.kommunal.se>

Swedish Society of Medicine [Svenska Läkarsällskapet]: <http://www.svls.se>

10.3 List of laws

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

Act Concerning Support and Services for Persons with Certain Functional Impairments [Lagen om Stöd och Service till vissa Funktionshindrade] 1993:387.

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

Communicable Disease Act [Smittskyddslagen] 1988:1472.

Compulsory Mental Care Act [Lagen om psykiatrisk tvångsvård] 1991:1128.

Dental Care Act [Tandvårdslagen] 1985:125.

Family Doctor Act [Lag om husläkare] 1993:588.

Forensic Mental Care Act [Lagen om rättspsykiatrisk vård] 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] 1982:763.

Law on Professional Activities in the Health Care Sector [Lag om yrkesverksamhet på hälso- och sjukvårdens område] 1998:531.

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

Medical Products Act [Läkemedelslag] 1992:859.

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

Patient Injuries Act [Patientskadelagen] 1996:799.

Public Procurement Act [Lag om offentlig upphandling] 1992:1528.

Social Services Act [Socialtjänstlagen] 1980:620, from 2002-01-01
2001:453.

”Stop Law” [Lag om inskränkning i landstingens rätt att överlämna
driften av akutsjukhus till annan] 2000:1440.

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