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Health Care Systems in Transition

Finland

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Finland 2002

The European Observatory on Health Care Systems is a partnership between the World Health Organization Regional Office for Europe, the Government of Greece, the Government of Norway, the Government of Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

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Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of each health care system and of reform initiatives in progress or under development. The HiTs are a key element that underpins the work of the European Observatory on Health Care Systems.

The Observatory is a unique undertaking that brings together WHO Regional Office for Europe, the Governments of Greece, Norway and Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. This partnership supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe.

The aim of the HiT initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health care systems and reforms in the countries of Europe and beyond. The HiT profiles are building blocks that can be used to:

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

The HiT profiles are produced by country experts in collaboration with the research directors and staff of the European Observatory on Health Care Systems. In order to maximize comparability between countries, a standard template and questionnaire have been used. These provide detailed guidelines

and specific questions, definitions and examples to assist in the process of developing a HiT. Quantitative data on health services are based on a number of different sources in particular the WHO Regional Office for Europe health for all database, Organisation for Economic Co-operation and Development (OECD) Health Data and the World Bank.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Most of the information in the HiTs is based on material submitted by individual experts in the respective countries, which is externally reviewed by experts in the field. Nonetheless, some statements and judgements may be coloured by personal interpretation. In addition, the absence of a single agreed terminology to cover the wide diversity of systems in the European Region means that variations in understanding and interpretation may occur. A set of common definitions has been developed in an attempt to overcome this, but some discrepancies may persist. These problems are inherent in any attempt to study health care systems on a comparative basis.

The HiT profiles provide a source of descriptive, up-to-date and comparative information on health care systems, which it is hoped will enable policy-makers to learn from key experiences relevant to their own national situation. They also constitute a comprehensive information source on which to base more in-depth comparative analysis of reforms. This series is an ongoing initiative. It is being extended to cover all the countries of Europe and material will be updated at regular intervals, allowing reforms to be monitored in the longer term. HiTs are also available on the Observatory's website at http://www.observatory.dk.

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The current series of Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Care Systems.

The European Observatory on Health Care Systems is a partnership between the WHO Regional Office for Europe, the Governments of Greece, Norway and Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat, and the research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is by Suszy Lessof. The series editors are Reinhard Busse, Anna Dixon, Judith Healy, Laura MacLehose, Ana Rico and Sarah Thomson.

Administrative support, design and production of the HiTs has been undertaken by a team led by Myriam Andersen, and comprising Jeffrey V. Lazarus, Anna Maresso, Caroline White, Wendy Wisbaum, and Shirley and Johannes Frederiksen.

We are grateful for access to the Regional Office health for all database, from which data on health services were extracted; to OECD for the data on health services in western Europe, and to the World Bank for the data on health expenditure in central and eastern European (CEE) countries. Thanks are also due to national statistical offices that provided national data.

Introduction and historical background

Introductory overview

Finland is an independent republic located to the north-east of the Baltic Sea. It is bordered by Norway to the north, the Gulf of Finland to the south, Sweden and the Gulf of Bothnia to the west and the Russian Federation to the east (Fig. 1).

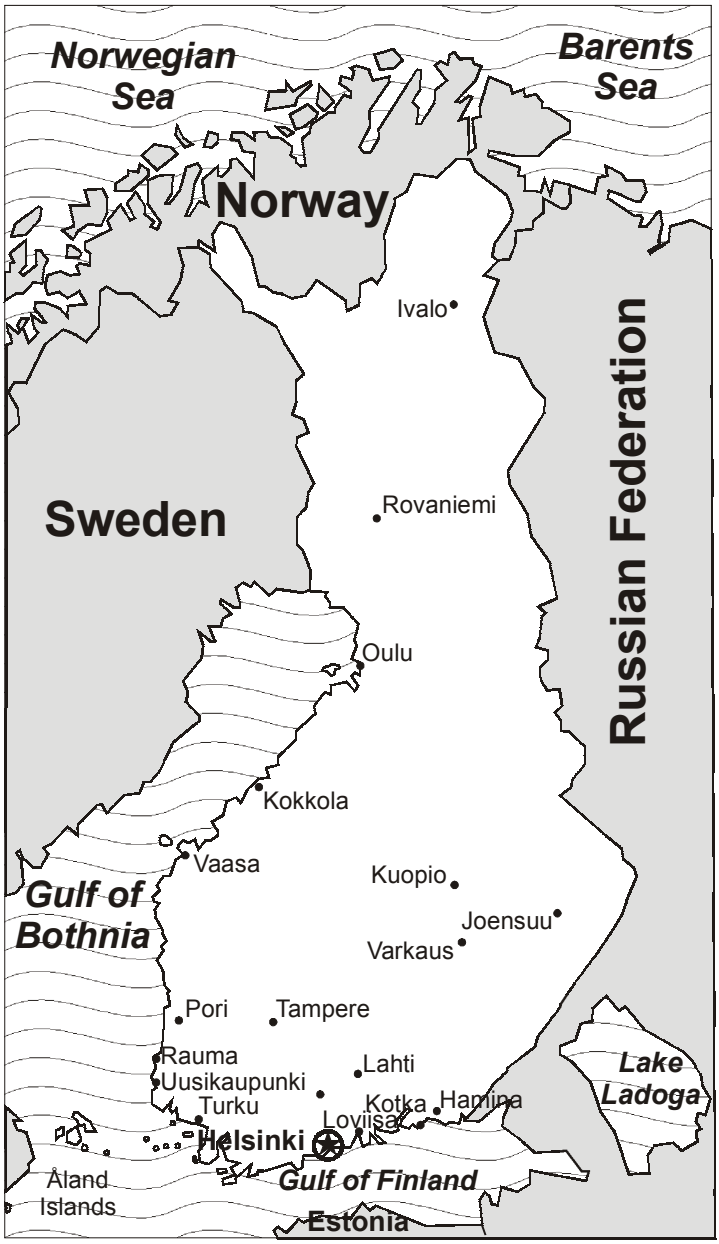
The land area is 338 145 km^2, making it the seventh largest country in Europe. Some 68% of the land area is covered by forests and 10% by water, and 6% is under cultivation. The climate is marked by cold winters and warm summers, and the Gulf Stream has some influence.

Much of the country is sparsely populated, with an average population density of 16/km^2. The bulk of the population is concentrated in the urban areas of the southern and western parts of the country, while roughly a third lives in rural areas.

The current population is about 5 million (Table 1). It grew by about a quarter of a million per decade during the twentieth century, growth being rapid in the first half of the century and slowing down towards the end.

If mortality, fertility and migration remain at present levels, the population will grow to 5.2 million and then begin declining, returning to 5 million or so again in the 2030s. The average age of the Finnish population is slightly below the European Union (EU) average, but will rise considerably over the next few decades. At present, people under 15 years constitute about 18% of the total population and those over 65 years some 15%. The number of people aged 65 years or over will grow by about 400 000 (i.e. by over 50%) in the next 20 years. The economic dependency ratio (the number of non-employed relative to the number of employed) will become less favourable, particularly after the year 2010.

Fig. 1. Map of Finland[1]



Source: Central Intelligence Agency World Fact Book.

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Care Systems or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

Table 1. Demographic and health indicators, 1985–2000

	1985	1990	1995	1996	1997	1998	1999	2000
Population (million)	4.910	4.998	5.117	5.132	5.147	5.160	5.171	5.181
Percentage of total population over 65	12.6	13.5	14.3	14.5	14.6	14.7	14.8	14.9
Live births per 1000 population	12.8	13.1	12.3	11.8	11.5	11.1	11.1	11.0
Deaths per 1000 population	9.8	10.0	9.6	9.6	9.6	9.6	9.6	9.5
Fertility (children per women aged 15–49)	1.6	1.8	1.8	1.8	1.7	1.7	1.7	1.7
Female life expectancy at birth (years)	78.5	78.9	80.2	80.5	80.5	80.8	81.0	81.0
Male life expectancy at birth (years)	70.1	70.9	72.8	73.0	73.4	73.5	73.7	74.1
Infant mortality per 1000 live births	6.3	5.9	4.0	3.9	3.9	4.2	3.8	3.8

Source: Statistics Finland, 2001.

Having been for 600 years under Swedish and then for 100 years under Russian rule, Finland became an independent republic with its own constitution in 1917. After that, the country's development was influenced by two wars, the civil war and later the Second World War. Finland is divided into five administrative provinces and the Åland Islands, which have an autonomous status. Finland has enjoyed highly stable political conditions for a long time. The government has typically been composed of coalitions.

The head of the state is the President of the Republic, who is elected for a period of six years by direct popular vote. For the first time in Finnish history a woman, Ms Tarja Halonen, was elected President in March 2000.

The parliament has a single chamber of 200 representatives, elected for a four-year term by direct popular vote. The government must enjoy the confidence of the parliament. After the general election in 1999, the seats were divided among the political parties as follows: the Finnish Social Democratic Party, 51 seats (26%); the Finnish Centre Party, 47 (24%); the National Coalition Party, 46 (23%); the Left Wing Alliance, 20 (10%); the Swedish People's Party, 12 (6%); the Green Party, 11 (6%); the Finnish Christian Union, 10 (5%); the True Finns Party, 1 (0.5%); the Reform Group, 1 (0.5%); and the Alkio Centre Group, 1 (0.5%).

The present government, formed in April 1999, is a coalition consisting of the Social Democratic Party, the National Coalition (conservative), the Left Wing Alliance, the Green Party and the Swedish People's Party.

Cooperation with the other Nordic countries – Denmark, Iceland, Norway and Sweden – has long existed and covers a large number of issues, ranging

from social and cultural to technical matters. Finland became a member of the EU in 1995. This membership gave new duties and roles to the political institutions, and in many instances legislation has had to be amended to correspond with EU legislation. The impact of EU membership on the Finnish economy is difficult to evaluate, however, as many other factors such as the preceding economic recession also had an influence. Finland was one of the first countries to enter the third stage of Economic and Monetary Union (EMU) in 1999.

Finland has two official languages, Finnish and Swedish, and about 6% of the population are Swedish-speaking. In addition, there is a small number in Lapland, in the north of the country, who speak Same and some Romany speakers. Various other languages are spoken by the growing number of immigrants.

The standard of education in Finland is currently at the general European level. Young people are more likely than their elders to have gained a certificate, diploma or degree. In the 25–34-year age group, over 80% have at least qualifications at the upper secondary level; the corresponding figure for the 55–64-year age group is 37%. The trend continues to rise. Gender equality can be considered to have been achieved in Finnish education, and women account for nearly 50% of the workforce.

Many responsibilities, including primary education and the social and health services, are devolved to the level of the 448 municipalities. The tradition of devolving responsibility to municipalities has a long history in Finland, evolving over several centuries. The main decision-making power in the municipalities lies within the municipal councils, which are elected for a four-year term. Municipalities levy a local income tax, which is decided independently by each municipality (on average about 17.5 % of taxable income). Municipalities also receive other tax revenues, subsidies paid by the state and other revenues. Municipalities and joint municipal organizations make up almost two thirds of all public expenditure in Finland. Most of the municipalities' expenditure arises from arranging basic services such as social and health services, primary education, cultural services and infrastructure.

The Finnish economy is based on services and industry. Finland's industry has traditionally been built on harnessing forest resources. Forests are still an important raw material but engineering and high technology, led by information technology, have now become other leading industries. Finland is relatively dependent on foreign trade, as shown by exports as a proportion of GDP (about 40%). The main export products are electro-technological products, pulp and paper, machinery and equipment; the main import products are raw materials and other production necessities, investment goods and consumer goods.

Finland experienced a severe economic recession in the first half of the 1990s (Table 2).

Table 2. Macroeconomic indicators, 1990–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP growth rate, % change		-3.3	-3.3	5.5	5.0	13.4	3.2.	6.3	5.3	4.5	9.6
GDP per capita, US$ PPP	16 442	15 761	15 208	15 967	16 692	18 861	19 408	20 471	21 793	22 702	24 841
Annual average rate of inflation	6.1	4.1	2.6	2.2	1.1	1.0	0.6	1.2	1.4	1.2	3.4
Total unemployment, % of labour force	3.2	6.6	11.7	16.3	16.6	15.4	14.6	12.7	11.4	10.2	9.8
Employment rate, % of active population	74.1	70.0	64.7	60.6	59.9	61.1	61.9	62.9	64.1	66.0	66.9

Sources: Statistics Finland, 2001 and OECD Health Data, 2001.

The recession was caused by a number of factors such as the global economic crisis, the collapse of trade with the Soviet Union, and sudden liberation of capital flows. Between 1990 and 1993 the economy shrank by almost 15% and massive unemployment emerged, the unemployment rate rising from 3.5% to 19% in the same period. The state had to finance many public sector activities by taking up a growing amount of loan. Also, the economy of the municipalities suffered from the crisis to various degrees.

Since 1994, Finland has been recovering from the crisis. The national economy has strengthened and has turned into a surplus. The annual growth in GDP has been about 5%. By 1999, real GDP per capita (purchasing power adjusted) was close to the EU average. The state debt has also been decreased: at the end of 2000 it was Fmk 377 billion (€ 63 billion, about 48% of GDP).

The overall economic situation in the municipalities has also improved, although there remain differences between individual municipalities. Some of the municipalities are doing well, and their future situation seems to be improving further (the number of municipalities in this group is growing). Some municipalities are in a situation where their development cannot be predicted: it can either improve or worsen. Finally, there is a smaller number of municipalities that have economic problems, and whose ability to arrange basic services varies. Many of these municipalities are in the sparsely populated areas in the eastern and northern parts of Finland.

Unemployment has considerably been reduced following the rapid growth in the national economy and the employment policy of the Government. By 2000, the unemployment rate had fallen to less than 10%. Unemployment has become more polarized, however: those who have recently become unemployed usually find a new job rapidly, but the situation of those who have difficulty in

finding work is becoming even worse. Also, the structural features of unemployment have become more obvious: the older long-term unemployed find it more and more difficult to become employed, and regional differences in unemployment have grown.

The growing regional differences in unemployment can be observed in the continuing population drift from rural areas to the large cities in the south and west of Finland. This internal migration is the largest since the 1970s, when the previous large wave of internal migration was seen. There are 5–7 "growth centres" at present. Although there has generally been an increase in the number of available jobs almost everywhere in the country, almost 60% of new jobs are located in southern Finland. This, together with the changes in working life, such as the dwindling of traditional industries and unstable employment, are forcing working-age people to move to the large cities in the south and west. At the same time, the proportion of old people is growing in the regions that are being abandoned. The financial basis for arranging basic services is likely to weaken as the number of working-age people diminishes in these regions. Internal migration is also likely to lead to significant changes in the social networks and possibly in the service structure in all regions.

Health status

According to various indicators, the health of the Finns has considerably improved over the last few decades. Average life expectancy among the Finnish population has improved throughout the twentieth century.

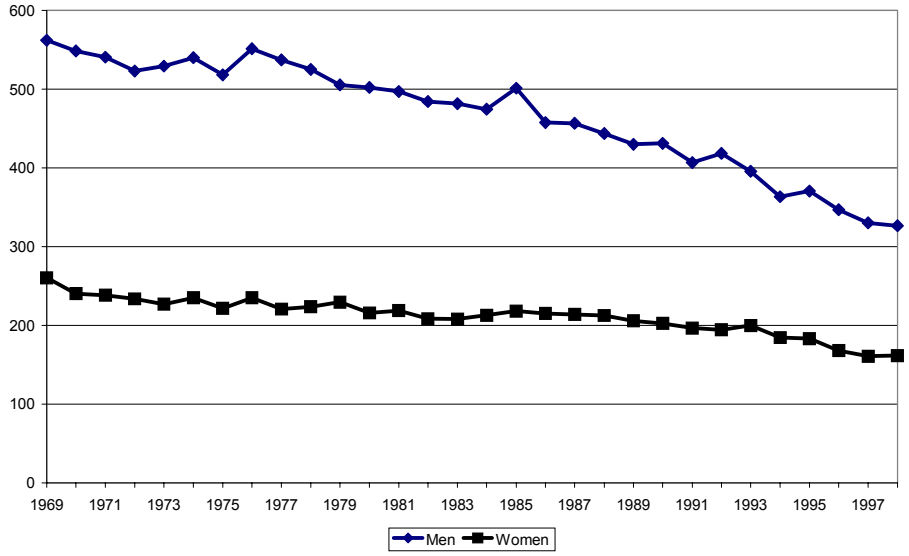
In the 1950s and 1960s, mortality among Finnish men was notably high when compared to international standards, mainly due to the high prevalence of coronary heart disease. Life expectancy has grown considerably since then, being 74 years for men and 81 years for women in 2000. This is largely due to the rapid decline in coronary heart disease and other cardiovascular diseases.

Fig. 2 shows the trend in age-standardized mortality from ischaemic heart disease in 1969–1998. Mortality from cancer and other diseases among the middle-aged population also decreased, although cancer morbidity increased somewhat. Infant mortality has also decreased rapidly over the last 30–40 years.

At the beginning of the 1970s, almost 15 out of every 1000 newborn infants died; since the mid-1990s the rate has been less than 5 per 1000, one of the lowest in the world.

There are still marked differences in mortality among adults between social groups and geographical regions. The average life expectancy of an academic male aged 35 years is 5–6 years more than that of a man of the same age but with basic education; for women the corresponding difference is 3–4 years. On

Fig. 2. Age-standardized mortality from ischaemic heart disease, 1969–1998



Source: Statistics Finland, 2001.

the south-western and western coasts, average life expectancy is 2–3 years more than in eastern and northern Finland.

According to population surveys, self-reported health among the middle-aged and the elderly has improved to some extent. About 40% of all adults report a long-term illness. Reported health is perceived to worsen after the age of 45. According to population surveys, long-term illnesses among children rose by 26% between 1976 and 1987, and at the end of the 1980s about 12% of those under 15 years of age had a long-term illness. The rise is due to an increase in various conditions, including metabolic diseases, allergies and respiratory diseases.

The most significant public health problems are circulatory diseases, malignant tumours, musculoskeletal diseases and mental health problems. Emerging problems are allergies, chronic lung diseases, asthma and diabetes, particularly type II. Circulatory diseases make up about half of all causes of death. Although age-standardized morbidity from circulatory diseases has dropped, the number of patients has increased because of the aging of the population.

The occurrence of and mortality from coronary heart disease increased up to the end of the 1960s, but has since dropped by over 50% among the middle-aged population. Mortality from coronary heart disease among women is a little less than the European average, and among men it is close to the European

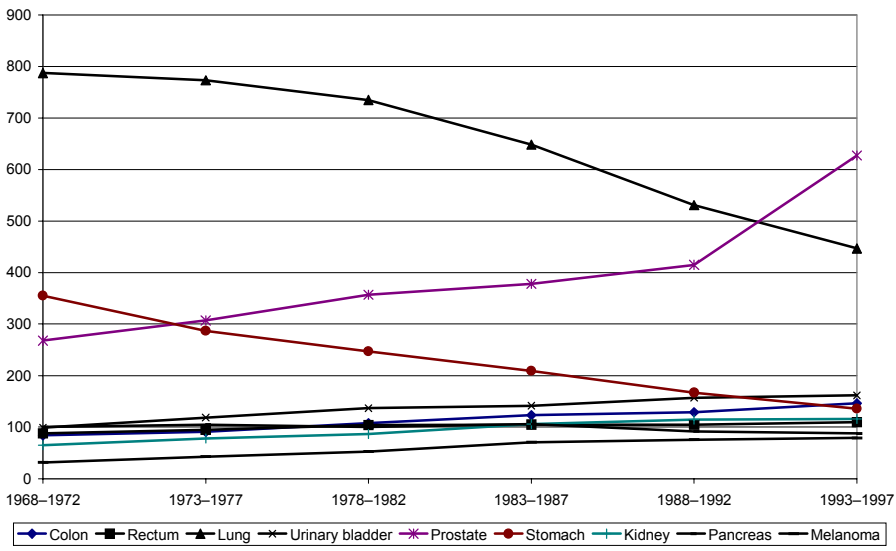
average. This positive development is due, *inter alia*, to changes in lifestyle (e.g. reduced smoking rates and blood cholesterol levels) and improved medical treatment. The reduction is also considered to be a cohort effect. Regional and social group differences in mortality from coronary heart disease still persist. Mortality is about 50% greater among men in eastern Finland than in western and south-western Finland.

Cancer is the second most common cause of death after circulatory diseases. More than one in four suffers from cancer at some stage in life. Morbidity from cancer among men has remained about the same level during the last few decades (Fig. 3).

However, the incidence of different kinds of cancer has changed. The most common types among men are prostate cancer, lung cancer and colorectal cancer. Among women, cancer morbidity has slightly increased. The most common types of cancer among women are breast cancer, colorectal cancer and certain types of cancer of the reproductive system (Fig. 4).

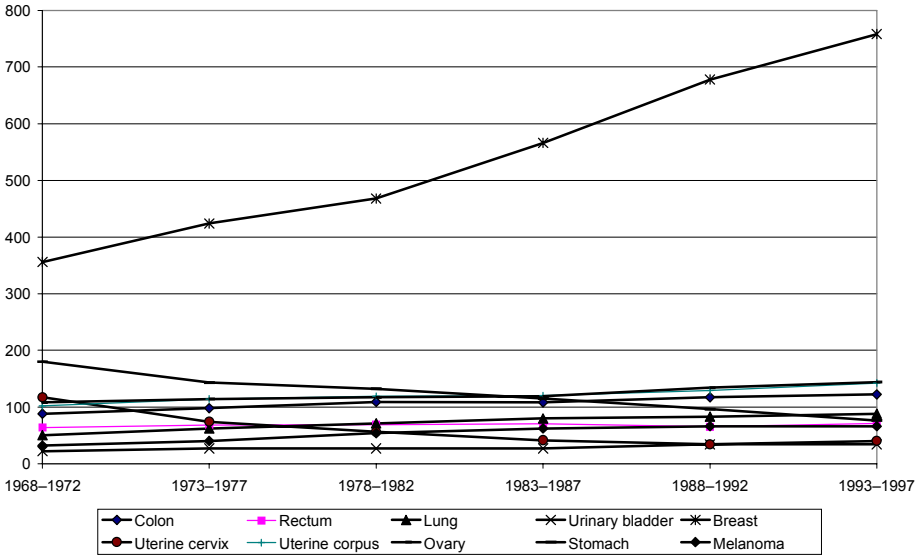
The prognosis of cancer patients has continuously improved. Five-year survival rates were 10 percentage points higher among those diagnosed with cancer in the 1980s than among those diagnosed some 10 years earlier.

Fig. 3. Prevalence of cancer among males, 1968–1997 (per 1 million, age-adjusted to the World Standard Population)



Source: Statistical yearbook on social welfare and health care, 2000.

Fig. 4. Prevalence of cancer among females, 1968–1997 (per 1 million, age-adjusted to the World Standard Population)



Source: Statistical yearbook on social welfare and health care, 2000.

Over a million people in Finland report a long-term musculoskeletal disease, and about 600 000 have restricted functional capacity because of it. Most common are low-back conditions, osteoarthritis and neck–shoulder syndrome. One in ten suffers from osteoarthritis of the knee, and 40% of women and 16% of men over 75 years suffer from osteoarthritis. The number suffering from musculoskeletal diseases is expected to increase because of the aging of the population, diminishing physical exercise and increasing overweight. Improved diagnostic and treatment methods also reveal an increasing range of musculoskeletal diseases.

Less than 10% of people over 30 years report some kind of mental health problem, although the number suffering from depression and other neurotic diseases has increased in recent decades. In the 1990s there were about twice as many people on disability pension owing to mental illness than in 1970s, while the occurrence of other mental illnesses has remained at about the same level.

Allergies and asthma are rapidly growing health problems in Finland. About 5% of the population suffer from asthma and about 10% have occasional asthmatic symptoms. Atopic eczema, chronic eczema of the hands and allergic

contact dermatitis are also common problems. About a third of all schoolchildren report some kind of an allergy. The reason for the growth in allergic diseases is not known.

There are estimated to be about 150 000 people with diabetes in Finland, about 23 000 of whom have type I diabetes (an incidence of almost 40 per 100 000 population). Type I diabetes, which usually emerges in childhood or adolescence, is more common in Finland than in any other country in the world. The incidence of Type II diabetes is also fairly high compared to other western countries. It has been estimated that the prevalence of diabetes in adulthood has grown ten-fold and the number of persons suffering from the disease has grown over twenty-fold in the last fifty years.

With the aging of the population, dementia will gain more importance as a public health problem. The prevalence of moderate and severe dementia is about 0.2–0.3% among people aged 65 years and under, about 4% among those aged 65–74, about 10% among those aged 75–84 and about 35% among those over 85.

About 9% of the working-age population in Finland report themselves unable to work and one third have a restricted capacity for work. Functional capacity seems to have improved somewhat since the 1970s, and absence from work due to circulatory and respiratory diseases has particularly decreased. However, there has been no reduction in absence due to musculoskeletal diseases and mental health problems.

Suicides are a significant cause of death among men under 35. Suicide mortality in Finland has generally been one of the highest in Europe. Suicide rates were highest towards the end of the 1980s, when the Finnish economy was booming (30.3 per 100 000 population in 1990). The trend has been decreasing since then, being 23.8 per 100 000 population in 1998. A national suicide prevention project was carried out between 1986 and 1996. Protocols and guidelines on different service models to adequately address the problem were developed in collaboration with various levels of care and with health care professionals, and have recently been adopted and implemented by different service sectors.

The number of abortions fell from a peak of over 23 000 in 1973 to 9900 in 1995. There has been a slight rise since then, but the numbers are still low by international standards (8.8 per 1000 women of childbearing age in 1999). In 1999, the number of abortions among females in the age group 15–19 years was 13.5 per 1000 females in that age group. This is a low number compared to other European countries.

One of the major changes in the lifestyle of Finnish people during the last decades is the change in dietary habits. The intake of saturated fats fell from

23% in the 1970s to 13% in the late 1990s. The consumption of vegetables, fruits and berries has increased. The use of salt has decreased (12 g/day among men and 8–9 g/day among women) but is still more than recommended (7–9 g/day).

Many of the health problems of Finnish people are worsened by the number of those who are overweight. About 400 000 people have a long-term illness that could be considerably improved if they lost weight. The treatment of illnesses related to overweight causes about 5–8% of direct health care costs.

The prevalence of smoking among men has fallen since the 1960s, but among women the habit has become more common. In 2000, 20% of working-age women and 27% of working-age men were daily smokers.

Alcohol consumption is about 9 litres 100% alcohol equivalent per capita (the figure includes both recorded and estimated unrecorded consumption), an average level for western industrialized countries. The tenth of the population that drinks most consumes about half of this amount. In the population aged 15–69 years it is estimated that one fifth of the male population and less than 5% of women have a problem with alcohol use. The number of heavy drinkers is about 200 000. About 1500 people die each year because of an illness related to alcohol consumption, and about 1000 of those who die from accidents and violence were drunk. Alcohol use among young people is common. According to the European School Survey Project on Alcohol and Other Drugs (ESPAD), carried out in 1999, teenagers in Denmark, Finland and the United Kingdom are the highest users of alcohol among their European peers.

Until recently, drug abuse was not a major problem in Finland, but there has been a rapid rise in the use of drugs. In the 1980s, about 14% of 18-year-old boys knew somebody who had tried drugs. In the middle of the 1990s, about half of young people knew somebody who was using drugs, one fifth had been offered drugs and 5% had tried drugs. The drug problem is most common in the metropolitan Helsinki area, but it is spreading rapidly to other parts of the country as well. Nevertheless, drug use is still a smaller problem in Finland than in other western European countries.

There have been marked changes in the social structure of Finnish society over the past few decades. There has been a large internal migration as well as many changes in working life and employment. More and more people attend higher education and for a longer period. Both longer education and the difficulties at the onset of working life have led to the later onset of childbearing. The stability and structure of families have changed, as seen in the growing number of single-parent households.

Historical background

In Finland, the organization and financing of health care have long been considered a public responsibility. The health care system has developed gradually, and no exact point of time can be identified for the introduction of the tax-financed system.

The Finnish municipalities have long been the basic units for arranging health care for their citizens. Before the Second World War, municipalities concentrated mainly on public health and the treatment of tuberculosis, other communicable diseases and mental diseases. After the War, municipalities contracted general practitioners, midwives and public health nurses, usually providing them with facilities and accommodation. Most of a general practitioner's income came from payments by patients, but midwives and public health nurses were salaried. As the overall number of doctors was small, they had to handle a wide variety of health problems.

In the 1940s, maternity and child-care centres began to be built throughout the country. The right to maternal and child health care was fixed by law, irrespective of residence and financial situation.

The provision of hospital care was fairly modest in the first half of the twentieth century. Treatment for tuberculosis was provided at specific tuberculosis hospitals. In the 1940s, municipalities formed federations, so-called tuberculosis districts, which were responsible for the prevention and treatment of tuberculosis.

The development of the hospital system was given a push in the 1950s. A new law stated that secondary care was to be provided by about 20 central hospitals, which were built in the larger towns. Most state-owned hospitals passed into the possession of municipalities, while psychiatric care remained organizationally separate. Later, in the 1960s, district hospitals were built in some areas of the country on the initiative of municipalities. As tuberculosis became less of a concern, tuberculosis hospitals gradually directed their activities towards the treatment of other diseases.

In spite of all the progress in organizing health services, visits to a doctor and medicines were expensive, and subsistence during illness was insecure. A National Health Insurance (NHI) scheme was therefore introduced in the 1960s. Part of the costs of drugs, private medical care and some other services were reimbursed through this scheme.

In the late 1960s and the beginning of the 1970s, there were still striking differences in the availability of health services, most of which were concentrated in urban areas. The NHI scheme did not remove these inequities in the

availability of services. The scheme did not promote the health of the population either, because it excluded funding for health promoting and prophylactic measures, such as family planning and vaccination. There was also an imbalance between primary and secondary health care. A network of specialized hospitals with high standards existed, but the supply of outpatient services and primary health care was insufficient. Almost 90% of total health care expenditure went on hospital care and only 10% on primary care.

Consequently, there was a clear need to do something about the situation. There was also a political will to develop health care, and the stable growth in the national economy secured the necessary resources.

All these factors led to the introduction of the Primary Health Care Act in 1972. A national planning system, with a rotating five-year plan that was annually updated for primary health care, was then introduced. The Primary Health Care Act obliged municipalities to provide primary care, including public health services and family planning, in health centres. All primary and public health care, which until then had been provided in a fragmented way, were brought together under the administration of the health centres. Primary medical care, various kinds of preventive services, home nursing, family planning, occupational services, rehabilitation, dental care and ambulance services were provided by the health centres. As such multidisciplinary and well equipped centres did not exist before the introduction of the law, the 1970s saw a comprehensive build-up of primary health care facilities throughout the country.

Also during this time, compensation by the NHI for loss of income due to illness and reimbursement for private health care were further developed.

In the 1970s and 1980s, increasing attention was paid to occupational health care, with the aim of extending it to all workers. The introduction of the Occupational Health Act in 1979 obliged employers to provide occupational health services to their employees.

The content of and resources for rehabilitation were also developed. The main focus of dental care at health centres was on children and adolescents, and strong emphasis was placed on prevention.

Hospital care was included in the national planning of primary health care in 1974, and in 1984 new legislation brought social services (for example, children's day care and homes for the elderly) into the same planning and financing system as health care. Since then, the collaboration of social and health care has been emphasized at both local and national level.

Until the end of the 1980s, the development of the Finnish health service was marked by continuous growth and diversifying services. Regional differences in the supply and availability of services diminished and the quality

of services improved. One of the measures undertaken in this period was the introduction of *omalääkäri*, the "personal doctor" system in some health centres (the name is a Finnish variant of "family doctor"; the direct translation from the Finnish word would actually be "my own doctor"). The personal doctor system was an initiative in some municipalities to improve access to health centre doctors and continuity of care; it was not a reform brought by changes in legislation. Later the system was developed more towards so-called population responsibility (*väestövastuu*), a model whereby a team of doctors and nurses is responsible for the health care of a geographically specified population.

During the late 1980s and 1990s, regulation by the state gradually decreased. At the same time, the possibilities for municipalities to choose how to organize social services and health care were further reinforced. In 1993, there was a major reform in the financing of health care, one of the most important steps in the deregulation process. Until 1993, the state had paid subsidies on health care, separately on primary health care and secondary care, allocated retrospectively according to actual costs and to activities included in the 5-year plan. After 1993, however, the subsidies started to be allocated to municipalities according to demographic and other need criteria. The reform was intended both to give more responsibilities to the municipalities and to improve efficiency within both primary and secondary care. As regulation by norms further decreased, being almost nonexistent by 2000, steering through information became increasingly important for the government as a means of monitoring the health care system. Steering through information is understood to encompass policy recommendations based on research and evaluation, evidence-based medicine and protocols, education and training, performance indicators and other activities based on information development.

At the beginning of the 1990s there was also a major reform in the state administration of social welfare and health. The rationale for this was the simplification and streamlining of social and health administration, and the strengthening of social and health policy at ministerial level. In 1991, the National Board of Health and the National Board of Social Welfare, which until then had both been important in guiding state administration, were amalgamated into one organization and soon thereafter abolished. Several new state agencies and institutions subordinated to the Ministry of Social Affairs and Health emerged (see the section on *Organizational structure of the health care system*). They took over some of the tasks that had previously been the responsibility of the two national boards, and the rest were transferred to the Ministry.

The developments in the Finnish health care system in the 1990s were further marked by the exceptionally severe economic recession. The national economy

was in great difficulties, as reflected in the health care system by numerous cuts in resources and unforeseen redundancies among health personnel.

Since the mid-1990s, the national economy has been steadily growing, but growth in health expenditure has been virtually nonexistent compared to that at the beginning of the 1990s. Nevertheless, the health care system seems to have survived the difficult times fairly well. So far at least, no major changes that would have been caused by the recession can be seen in the health indicators. Also, the employment situation of health personnel has improved, and there are already signs of a shortage of health personnel in the future.

The Finnish health care system has long had the support of the population, both before and during the economic crisis as well as now. This has been shown both in international and Finnish studies. According to a survey published by the European Commission in 2000, Finland has the highest number of people satisfied with their health care system in the EU: more than 80% of Finnish respondents were satisfied compared with the EU average of 41.3%.

The main milestones in the history of the Finnish health care system are summarized in Table 3.

Table 3. Milestones in the history of the Finnish health care system

Period	Event
1940s	Establishment of maternal and child careMeasures to treat and prevent tuberculosis (tuberculosis districts)
1950s	Development of the hospital system
1960s	Introduction of the National Health Insurance scheme Strong increase in the number of medical doctors to be trained
1970s	1972 Primary Health Care Act and establishment of health centres Introduction of the national planning system Developments in occupational health care
1980s	Health care and social services incorporated into the same national planning and financing system “Population responsibility” including “personal doctor” system Beginning of deregulation and decentralization
1990s	Increasing deregulation and emphasis on municipal autonomy Reforms in the state administration of health care 1993 state subsidy reform Maintaining health care services during and after economic recession

Organizational structure and management

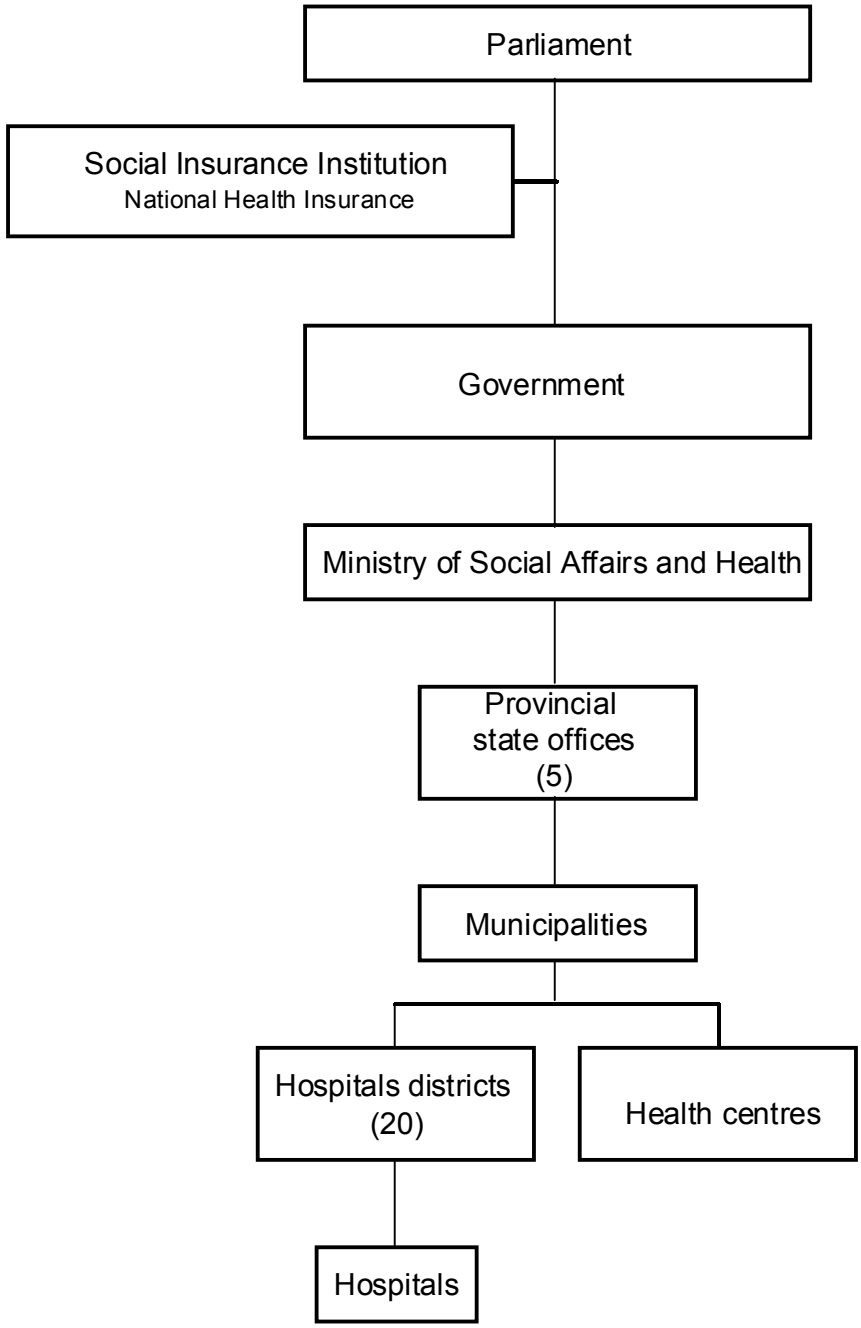
Organizational structure of the health care system

In Finland, municipalities have, by law, the main responsibility for arranging basic services such as education (except university education) and social and health services. At the moment there are 448 municipalities (Fig. 5). The population of a municipality varies from less than 1000 inhabitants to about 500 000, the average being about 11 000. Municipalities have the right to levy taxes. They also receive a subsidy from the state to enable them to arrange the services they are obliged to provide. In addition to the state subsidy for health care, they receive subsidies for social services and schooling.

The main decision-making power lies within the municipal council, which is elected every four years by the inhabitants of the municipality. The council appoints a municipal executive board, which is accountable to the council. The council also appoints members to the various municipal committees, according to the relative strength of political parties in the municipal council. The committees usually comprise those for health, social services, education, technical infrastructure and a number of others, and are appointed for four years. An official or a person permanently working in a position subordinate to a committee is not eligible to serve on the committee in question. The municipal council, the municipal executive board and the committees are politically accountable to the inhabitants of the municipality. In addition, the director of the municipality and a varying number of officials work in the administration of the municipalities.

There are variations in details and emphasis in the decision-making process in municipalities. Recently, the general trend has been towards delegating power from municipal councils to the various committees and leading officials.

Fig. 5. Organizational chart of the health care system



Decisions on the planning and organization of health care are made by the health committee, the municipal council and the municipal executive board. Here again there are variations. The leading personnel of the municipal health centres are often also included in the planning and organization of health services. To improve the coordination of social and health services, the health committee and social services committee can be merged into a single committee. In 1999, 38% of municipalities had merged these two committees, and the percentage is likely to have remained roughly the same since then.

The Ministry of Social Affairs and Health directs and guides social and health services at the national level. It defines general social and health policy, prepares major reforms and proposals for legislation, monitors their implementation and assists the government in decision-making. The government decides on general national priorities and proposes bills to be discussed by the parliament. The Ministry of Education is responsible for planning and partially subsidizing the education of health personnel.

Attached to the Ministry of Social Affairs and Health is the Basic Security Council. On the initiative of the Ministry, the council may investigate any deficiencies observed in the provision of municipal health services. The council may then make recommendations on how and when the deficiencies should be eliminated. The Council was established in 1993 because deregulation was feared to cause inequity between population groups and between wealthy and poor municipalities. So far, only single items have been brought to the Basic Security Council. However, it is felt that the council's prerequisites to intervene are not sufficient. Its future role will probably be evaluated.

There are several agencies and institutions attached to the Ministry of Social Affairs and Health that are responsible for various issues related to social welfare and health care.

- The National Research and Development Centre for Welfare and Health (*Stakes*) monitors and evaluates activities in social welfare and health care services, and carries out research and development in the field.
- The National Authority for Medico-legal Affairs handles disciplinary matters concerning health professionals and the legal protection of patients. For those purposes, it is responsible for the legalization and registration of health professionals.
- The National Agency for Medicines maintains and promotes the safe use of medicines, medical devices and blood products. It grants permissions for the sale of pharmaceutical products and assesses the quality and other documentation related to the market authorization of medical products. It also supervises the manufacture, import and distribution of medicines, and disseminates information on pharmaceuticals.

- The National Public Health Institute carries out research on diseases and their prevention; collects data on communicable diseases, health behaviour and the effects of health promotion; and ensures the availability of vaccines in the country.
- The Radiation and Nuclear Safety Authority is responsible for the prevention and restriction of radiation and regulates the use of radiation according to legislation.
- The National Product Control Agency for Welfare and Health handles the administration of licensing connected with the import, manufacture and sale of alcoholic beverages. It is also responsible for reports and other tasks as required by the Chemicals and Pesticides Act.
- The Finnish Institute of Occupational Health carries out research, offers training for occupational health and safety professionals, provides advisory services and disseminates information on occupational health.

Part of the total cost of health care is financed by the statutory NHI scheme. The scheme is run by the Social Insurance Institution, with about 400 local offices all over the country. The Social Insurance Institution falls under the authority of Parliament. Although the Ministry of Social Affairs and Health (Insurance Department) prepares health insurance legislation (for example, legislation on sickness and maternity benefits that are paid through the NHI), the Social Insurance Institution is a distinct institution separate from the ministry.

Thus the main levels in the administrative organization of health care are central government and the municipalities. There is, however, another administrative level between these, the province. In the middle of the 1990s there were still eleven provinces plus the Åland Islands, the latter having autonomous status. After a political debate they were merged into larger units, and since 1997 there are five provinces (and the Åland Islands). Each of them has its own provincial state office with several departments, one of them the social and health department. The provincial state offices promote national and regional objectives of the central administration, and keep contacts with municipalities in their area. The staff are appointed civil servants. The social and health departments are responsible for guiding and supervising both public, specialized and primary health care and private health care, as well as assessing basic services. Their responsibilities include handling of appeals relating to health service provision. They also support and participate in various training and development activities in their respective provinces. One of their responsibilities in social and health care has been the approval of capital investment plans.

The country is divided into 20 hospital districts, each responsible for providing specialized medical care and coordinating the public specialized care

within its area. The catchment population of hospital districts varies from 70 000 to 800 000 inhabitants. Each municipality must be a member of a hospital district.

Role of the private sector

Health services organized by municipality is the main health care system in Finland. Alongside the municipal system, private and occupational health services are also provided.

Private health care in Finland comprises mainly outpatient care, available mostly in the large cities. The most typical private health care provider in Finland is a physiotherapy unit of 2–3 workers (about 1450 provider units). The second most typical provider is a medical doctors' practice (about 1000 provider units). Some of the large provider units, a few hospitals and occupational health care units may have several hundred employees. The majority of doctors working in the private sector are specialists, whose full-time job is in a public hospital or health centre.

The number of outpatient visits and number of health personnel in private health care have been slightly increasing after a decline during the recession. In 1996 there were 13.6 million visits to all provider units, and in 1999 there were 15.1 million visits (the numbers include all private care, such as visits to doctors, dentists and physiotherapists). Roughly half the health personnel in private health care are part-time workers. Private inpatient care forms about 3–4% of all inpatient care. The Private Health Care Act regulates the provision of private health services, the latest changes in the Act being from 1990.

Planning, regulation and management

Everyone in Finland has the right to health services regardless of ability to pay or place of residence. The constitution states that public authorities shall guarantee for everyone, as provided in more detail by an Act of Parliament, adequate social, health and medical services and promotion of the health of the population.

The 1972 Primary Health Care Act obliges municipalities to provide health promotion and disease prevention, medical care, medical rehabilitation and dental care. It also obliges them to provide school, student and occupational health care, screening services (for cervical cancer and breast cancer), family planning services, mental health care (when it is appropriate to provide it at a health centre) and ambulance services. The statutory services are to be provided

in health centres – either the municipality's own or in conjunction with other municipalities. Municipalities can also buy services from the private sector.

Municipalities are also obliged by law to arrange specialized medical care for their inhabitants. The 1991 Specialized Health Care Act and the 1991 Mental Health Act regulate the organization of these services. There is also separate legislation concerning some vulnerable groups of the population, such as the disabled and alcohol and drug abusers. The law on social and health care planning and state subsidies regulates the state subsidies on social and health services and investments.

In general, the legislation does not regulate in great detail the range, content and way of organizing the provision of services. Legislation provides a framework for the provision of services that allows for different local solutions.

In practice, there are differences in the organization of services due to local circumstances and the population's needs. For example, the age structure, the local policy targets, the social environment or the geographical location of a municipality may influence the way in which services are organized and provided.

Until 1993, the state regulation of health service provision was rather detailed. There was legislation and a national five-year plan for social and health care. The plan was prepared by the Ministry of Social Affairs and Health (first processed by the National Board of Health in contact with the regional and local levels) each year and was approved by the government along with the proposed state budget. The plan contained guidance for organizing social and health care services such as the numbers of new positions for personnel to be funded by state subsidies.

The implementation of the state subsidy reform in 1993 reduced regulation by the state. The main objectives of the reform were to reduce central administration, to increase decision-making power and responsibility at the local level, to improve coordination of primary and secondary care, and to introduce incentives for efficient provision of care. A central change was that the state subsidies on social and health care started to be paid prospectively. The reform did not change the fundamental principle of the Finnish health care system: the municipalities are responsible for providing health services. Municipalities were given an even more active role in arranging services and more freedom in deciding on administration, number of personnel and user charges. Nevertheless, the maximum amounts of user charges remained regulated by legislation. Municipalities retained the possibility of purchasing services from any provider they wanted to, including private providers if they offered services of sufficient quality.

There was no substantial opposition to the state subsidy reform. The reform was designed at a time when the economic situation of the country was good and no clear signs of the crisis were in sight. Agreements for a transitional period were made so that changes in the amount of state subsidies would not be too radical for an individual municipality. The actual economic impact of the state subsidy reform on municipalities could not be assessed, however, because the strong economic recession had started at the same time as the state subsidy reform was implemented.

At the same time, the national social and health care plan was changed from a five-year to a four-year plan. In 1999, the national plan was replaced by the Social Welfare and Health Care Target and Operating Plan. This is a programme on social welfare and health care that every newly appointed government draws up after the parliamentary elections for its term of office. The plan is prepared in working groups comprising representatives of the Ministry of Social Affairs and Health, municipalities, nongovernmental organizations, health care employees and professionals.

The most important ways of steering the health care system are now by means of information, legislation and experimental projects. Evidence-based medicine, local auditing and quality development programmes are also in growing use.

As stated earlier, there are 20 hospital districts in Finland. Hospital districts are federations of municipalities. Until 1999, there were 21 of them, but in 2000 two hospital districts in the capital city area and the Helsinki University Hospital were merged into one single district. The hospital districts are responsible for providing specialized health care and coordinating public hospital care within their area. One hospital district usually comprises 1–3 short-term (non-psychiatric) hospitals and 1–2 psychiatric hospitals. Both inpatient and outpatient care are provided in these hospitals.

Each municipality must be member of a hospital district, but since 1999 municipalities can choose the hospital district they want to be a member of. In addition to providing services through their own hospital district, municipalities can provide these through another district or a private provider. However, the latter two options are rarely used. It is difficult to compare the prices and services of different providers, as these are defined in very different ways. Another reason for municipalities not purchasing much outside their own district is the existence of the common fund, i.e. the equalization mechanism for very high costs in each hospital district.

Municipalities negotiate annually on the provision of services with their hospital district. Municipalities and hospital districts may draw up a framework

agreement for the following year on the amount and costs of services. The agreement is not a formal contract, and prices are defined by the hospital district. Thus the "classical" purchaser–provider model does not exist in Finland.

Legislation defines the hospital district's role "to arrange specialized medical care within their areas according to their population's needs". In practice, however, their activities do not always reflect their population's needs. Financing and provision are not generally sufficiently separated for hospital districts to act as third-party purchasers. There is scope for improving the role and tasks of the districts.

Municipalities may feel powerless to influence the costs and provision of hospital care. In most cases, they also lack or are not able to utilize the medical, economic and other kinds of skills necessary for arranging services in the most efficient way. This is particularly true for small municipalities.

As their financial situation has become tight, municipalities have started showing growing interest in trying to control specialized care costs and in estimating annual budgets more precisely. This has often led to annual budgets for specialized care being made too tight. On the other hand, municipalities and hospital districts have increasingly started negotiating to define the need for and use of services more precisely. Several development projects have been launched to deal with the optimization of cooperation in primary and specialized care.

Hospital districts must have an equalization mechanism for spreading the risks of very high costs between the district's member municipalities. If an individual patient's treatment costs exceed a specified threshold (agreed within the hospital district), all municipalities that are members of the same district will pay all or part of the excess. This threshold varies from Fmk 100 000 (€ 16 819) to Fmk 500 000 (€ 84 094). There are some variations on how the right to equalization is defined by individual hospital districts. Most districts allow equalization for one period of illness, excluding certain types of care; one specifies that costs should be incurred in one hospital; while other districts have set the equalization threshold for all hospital care costs in any one year.

The equalization mechanism is very important owing to the small size of municipalities: without it, the risk to municipalities of very expensive treatments would be too high, for example the costs of organ transplantation.

The differences between the equalization mechanisms of hospital districts are considered to be a problem from the point of view of citizens' equity. Revised legislation is in preparation on this basis. Nevertheless, the equalization mechanism does not affect patient co-payments.

Occupational health care

The 1979 Occupational Health Care Act obliges employers to provide occupational health care for their employees. The Act defines compulsory occupational health care as those health services that are necessary to prevent health risks caused by work. This implies that employers have to provide sufficient information on health risks related to work and to advise their employees on how to avoid those risks. Furthermore, they are obliged to arrange physical examinations and first aid for their employees at the place of work. Employers are also obliged to check an employee's state of health when a job might endanger his health. In general, occupational health care is seen as preventive rather than curative. In addition to the compulsory occupational health care, however, employers can voluntarily arrange other health care and medical treatment for their employees.

Employers can arrange occupational health care in different ways. They may, for example, set up their own health units. Large firms tend to have an (outpatient) unit of their own, with one or more doctors and nurses. Employers may also buy occupational health services from a private provider or a health centre owned by a municipality. A common way of providing occupational services is to buy them from a private provider – usually a private group practice.

The NHI reimburses employers 50% of the necessary and appropriate costs of occupational health care. Employees are not charged for using those services that are compulsory for the employer. Over 90% of all employees in Finland are offered occupational health care by their employers. Employers and employees participate in financing the scheme through their NHI payments.

The relationship of different sectors

The private and public sector services are neither coordinated with each other nor are they real competitors. Neither are their roles exactly similar. The same is also true of the occupational health services. The parallel private and occupational health care systems, alongside the public health care system, offer more choice for patients living in areas where these are available. At the same time, the parallel systems also create problems, especially from the organizational and financial points of view. More detail on the problems relating to these parallel systems is included in the section on health care finance and expenditure.

There are additional problems with the organizational structure of health care in Finland. There are problem areas in the planning of manpower, and in

the coordination of operational costs and capital investments. The Ministry of Education partly plans and finances the education of health personnel, but neither the municipalities, which employ health personnel, nor the Ministry of Social Affairs and Health has a strong influence on manpower planning. It is important that the Ministry of Social Affairs and Health, the municipalities and the Ministry of Education strengthen cooperation in manpower planning.

Negotiations on the wages, salaries or fees of health personnel in municipal health care occur between the Commission for Local Authority Employers (an organization that promotes the interests of Finland's municipalities on the labour market) and the labour unions. The relevant ministries do not participate in these negotiations.

Another example of problematic coordination is the financing of capital investments. There is a system for financing municipal investments in the form of state subsidies. In addition, Finland's Slot Machine Association has become an important financier of capital investments. (The Slot Machine Association operates slot machines, amusement machines and casino games. Its revenues support the work of voluntary health and welfare organizations, such as sheltered housing for the aged and disabled, assistance for individuals and families in difficulty, youth work and care for substance abusers.) The association supports only third-sector organizations, i.e. it does not finance any municipal health services or private profit-making providers. Its share in financing capital investments in health care is difficult to calculate precisely because it finances investments that can also be considered social care or that are indirectly related to health care, such as special housing for the elderly or the mentally ill.

The unwanted effects of insufficient coordination are well known, and constant efforts are made to correct the deficiencies.

Health services arranged by the state

The state arranges health care for the armed forces and for prisons, and moreover owns two psychiatric hospitals. The education of medical doctors and university-level research in the health sciences, which mainly occur in university hospitals owned by municipalities, are financially subsidized by the state.

The role of patients

Citizens participate in the health care system by having the right to vote every four years in both municipal and parliamentary elections. The most important channel for public participate are the municipal authorities. These are important decision-makers, at least where primary health care is concerned. There are also various patients' associations, which may influence decision-makers on

issues concerning the planning and management of health care locally, regionally and nationally. Many service provider units collect the opinions and experiences of service users.

According to the 1987 Patient's Injury Law, amended in 1999, a patient has the right to compensation for unforeseeable injury that occurred as a result of treatment or diagnosis. Notable in this law is the fact that health care personnel need not be shown to be legally responsible for the injury. To receive compensation, it is sufficient that unforeseeable injury as defined by law occurred.

In 1993, a law on patients' status and rights, the first such law in Europe, came into force. This law mainly concerns the patient's right to information, informed consent to treatment, the right to see any relevant medical documents, and the right to autonomy. A "patient ombudsman" system was also introduced by this law. A review of the functioning of the law in 1996 showed that it had influenced practical functions within health care, but that patients' active participation and access to information needed to be improved. According to the review a patient ombudsman had been introduced in each health care organization. The patient ombudsman system was considered good but was thought to need further development.

Quality assurance

The quality of services and health care facilities are in general of a high standard. As with the range of services, the quality of services is not defined in detail by legislation or by other means. It has been generally thought in Finland that the high standard of education of doctors, nurses and other health personnel is an important means of guaranteeing the quality of services.

Various kinds of projects addressing quality assurance have raised growing enthusiasm, both in primary and in specialized care. National guidelines on quality assurance in social welfare and health care were published in 1995 and 1999 by the Ministry of Social Affairs and Health, the National Research and Development Centre for Welfare and Health and the Association of Finnish Local and Regional Authorities. The principles behind the guidelines are the promotion of patient-oriented services, the incorporation of quality assurance as part of daily activities, and the use of knowledge as the basis for monitoring, measuring and evaluating activities in social welfare and health care.

Quality recommendations have been either published or are in preparation on the basis of the Social Welfare and Health Care Target and Operating Plan. Such recommendations have so far been produced for care of the elderly and mental health services.

Decentralization of the health care system

The Finnish health care system is very decentralized. As described above, 448 municipalities are responsible for arranging health care and regulations on health care arrangements are not very detailed. There has been little opposition to decentralization; the population in Finland is dispersed and local decision-making has always been regarded as important.

Significant variations, both in clinical practice and in the delivery of health services, have been enhanced by decentralization. For example, the numbers of inpatient cases and surgical procedures per capita vary markedly from region to region and the differences cannot be explained by different levels of morbidity or age and sex structure. These variations were already visible before the 1993 state subsidy reform. There are also wide differences in per capita expenditure on health care between municipalities. A review in 2000 showed that significant variations still exist.

Municipalities often have a very small population: 75% of municipalities have fewer than 10 000 inhabitants and 20% have fewer than 2000. This creates problems with the assurance of sufficient skills for providing services and also brings economic risk: one costly treatment could break the economy of a small or medium-size municipality. However, the equalization mechanism within hospital districts described above helps to manage the problem of risk pooling.

Health care financing and expenditure

Main system of financing and coverage

The health care system in Finland is mainly tax-financed. Both the state and the municipalities have the right to levy taxes. In 1999, about 43% of total health care costs were financed by the municipalities, about 18% by the state, 15% by the National Health Insurance (NHI) and about 24% by private sources (mainly households).

About two thirds of total health care expenditure is spent on health services provided by municipalities. Most of the remainder is spent on medicines and other pharmaceutical products, private health care, medical aids and prostheses, and occupational health care. This third is largely financed from the NHI, out-of-pocket payments and employers.

The state's revenues consist mainly of a progressive income tax and indirect state taxes. Combined spending on health, welfare and social security accounts for roughly a fifth of annual state expenditure. State financing of health care is largely in the form of state subsidies, which are allocated by the Ministry of Social Affairs and Health to every municipality. (The state also allocates subsidies for education and social services.) The allocation of state subsidies is explained in more detail later.

Municipal income tax is a fixed proportion of income, which varies from municipality to municipality. On average it is 17.5% of taxable income. Municipalities also levy real estate tax and receive a share of the revenues from corporate taxes. About half of the municipalities' income arises from tax revenues. Other important income sources are operating revenues and state subsidies. Besides health care, municipalities' revenues are used for other services such as education and social services. On average, almost 50% of the

budgets of municipalities are spent on social welfare and health care, with about 24–25% spent on health care alone.

There are striking variations between municipalities (estimated at up to 2–2.5-fold) in per capita health care expenditure. These differences have existed for a long time, although in the 1990s they appeared to diminish slightly. This variation can only to a small extent be explained by need factors such as age structure, mortality and very low population density, nor do the financial position of a municipality or changes in the state subsidy system explain them. The local division of tasks between the social and health services, in addition to variables decided by municipal policy-makers (such as the volume of inpatient facilities) seem to be the most powerful determinants of the variation. This means that there is scope for reducing health care costs and increasing efficiency.

NHI revenues come mainly from employers' and employees' payroll contributions, as well as from other minor sources (returns on assets, charges to liable external third party insurers, etc.). The contributions of wage and salary earners and pensioners are a specified percentage of their income, and that paid by employers a specified percentage of their employees' earnings. The revenues of the NHI in a given year must be approximately equal to expenditure in that year. The state guarantees the solvency of the NHI, and since 1998 the state has paid an annual contribution to the NHI.

The most marked change in the financing of health care has been that in the shares paid by the state and municipalities. In 1990, the state financed about 36% and the municipalities about 35% of total health care expenditure (Table 4). The state share has decreased radically since then, being 18% in 1999, whereas the share of the municipalities has grown to 43%. There has also been a clear increase in the amount provided by the NHI, although this is more moderate (11% in 1990 and 15% in 1999).

The reasons for the changes in the financing sources lie in the economic recession of the beginning of the 1990s. Due to the recession the state had to reduce public expenditure, which meant that state subsidies on health care were also cut. This was done gradually over several years. As the share of progressive sources of finance (state) has decreased and the share of regressive sources of finance (out-of-pocket payments) has increased, total financing of health care has become more regressive, i.e. costs have been increasingly shifted to low-income groups.

The increase in the amount financed by the NHI is mainly due to the growing use of new expensive pharmaceuticals. There has also been a clear increase in out-of-pocket payments by patients.

Table 4. Main sources of finance, percentage of total expenditure on health care, 1980–1999

Source of finance	1980	1990	1995	1996	1997	1998	1999
Public	**79.6**	**80.9**	**75.5**	**75.9**	**76.1**	**76.3**	**75.7**
Taxes	67.1	70.3	62.2	61.9	61.9	61.5	60.8
– state	38.2	35.6	28.4	24.1	20.6	19.0	18.2
– municipalities	28.9	34.7	33.8	37.9	41.3	42.5	42.6
Statutory insurance	12.4	10.6	13.3	13.9	14.2	14.8	14.9
Private	**20.4**	**19.2**	**24.5**	**24.1**	**23.9**	**23.7**	**24.3**
Out-of-pocket	17.8	15.6	20.6	20.1	19.8	19.5	20.0
Private insurance	0.8	1.7	2.0	1.9	2.0	2.0	2.1
Employers	1.2	1.4	1.5	1.6	1.6	1.7	1.7
Relief funds	0.6	0.5	0.4	0.5	0.5	0.5	0.5

Source: Social Insurance Institution, 2001.

The existence of several public funding sources creates difficulties. As explained above, municipal health care is financed by state and municipal taxes, and a relatively high proportion from user charges compared with the European average. The other public funding source is the NHI, which is used to compensate for loss of income during illness, pharmaceuticals, private health care, occupational health care and some other services. NHI reimbursements do not affect the amount of the municipalities' state subsidy, even though a considerable proportion of a municipality's population might use occupational and private health services. The NHI is financed by all citizens everywhere in Finland, but most private and occupational health care is available in the largest cities in the south of the country. Thus the utilization of private and occupational services is also supported by people who do not use these services. However, the other benefits paid by the NHI are equally available over the whole country.

Another problem with the existence of several public funding sources is that financing often determines how services are provided. For example, municipalities are responsible for financing institutional and outpatient care, but the NHI reimburses certain outpatient costs, mainly medication and transport. When it is not clear whether a treatment is outpatient or institutional, both parties have an incentive to shift responsibility and costs to the other. This often leads to perverse incentives and inefficient organization of services. In addition, the parallel systems have created overlapping capacity in terms of facilities and equipment, as well as difficulties with coordination.

It is believed that health care in Finland will remain tax-financed in the future. There are no plans at present to change the funding basis. Nevertheless, there seems to be a need to clarify and simplify the public financing system.

Health care benefits and rationing

The Finnish health care system provides comprehensive coverage to all the resident population. Some services are excluded from the statutory health system, including dental care for certain age groups and spectacles.

When talking about dental care in Finland, it must be borne in mind that there are actually two parallel systems for delivering dental care: the municipal system and the private system that is partly supported by the NHI. Up to now, municipalities have been obliged by law to provide dental care to persons born in or after 1956, veterans of the Second World War and adults with certain illnesses. Nevertheless, there were variations in the dental care provided by health centres. Some municipalities managed to offer dental care to their whole population, while others offered the obligatory services only. Further, the population groups mentioned above received partial reimbursement for basic treatments from the NHI if they visited a private dentist. Consequently, a significant portion of the Finnish population was excluded from public dental care.

The reasons for the exclusion of certain population groups from public dental care are historical. In the 1950s, the provision of public dental care started with children and was gradually extended to those who were born in or after 1956 (the year 1956 is arbitrary). It was planned to gradually extend publicly funded dental care to cover the whole population. However, when the extension should have taken place, in the early 1990s, the economic recession and pressure on public expenditure interrupted it. After the economy started recovering, the issue of extending dental care to the entire population was raised again. Also, improved oral health in children and young adults as well as more positive attitudes towards dental health generally contributed to growing interest in extending public dental care coverage.

In 2000, the decision was finally made that by the end of 2002 the entire population would be offered publicly funded dental care. In 2001, reimbursements from the NHI will be extended to persons born in or after 1946. At the same time, municipal dental care will be extended in stages. At the end of 2002, all age limits will have been removed and the whole population will be covered by publicly funded dental care. It is planned to finance the extension with existing resources by utilizing them more efficiently. Routine check-ups will be reduced for those persons who do not need them so often. There are also plans to develop evidence-based guidelines for certain treatments.

Spectacles are generally not financed by the public system, nor are alternative therapies or complementary medicine. Cosmetic surgery is publicly financed when it is necessary due to disease (such as burns or tumours) but not for solely

cosmetic reasons. *In vitro* fertilization and surgery for varicose veins are not excluded from the public system.

Employers are obliged to provide preventive occupational health services for their employees, but because many employers arrange also curative health services, there are differences in the services offered. All employees, however, have access to municipal services.

At present, the NHI provides partial reimbursement for medication prescribed in outpatient care, transport costs, occupational health care, health care for university students and rehabilitation in certain cases specified by law. In recent years, the NHI has reimbursed about a third of the costs paid by patients to private doctors as well as the costs of treatment and examinations ordered by them. In addition, the NHI scheme compensates for loss of income during illness, pregnancy and childbirth, and for loss of income incurred by the parents of a sick child during treatment and rehabilitation of the child. Compensation for income loss makes up slightly over 50% and reimbursements for drugs about 30% of all benefits paid by the NHI.

There are no plans for an explicitly stated basic package of benefits (services). For the time being, the service coverage is expected to remain about the same.

There have been discussions about setting priorities. A priorities task force published its report in autumn 1994. The report did not contain any specific recommendations, only very general principles and guidelines. It did emphasize transparency in decision-making, stating that the main principles for these decisions should be human rights, self-determination, equality and justice. In setting priorities, a distinction should be made between priority-setting at the political or administrative level and at the clinical level.

Discussions on priority-setting emerged again at the end of the 1990s, culminating in a high-level consensus meeting on priority-setting in 2000. Some of the main issues were that health care should be provided on fair and equal grounds. It was claimed that the effectiveness of services should continue to be central and that health care should be built on a stable financial foundation. Further, good quality, good professional skills and innovations would be prerequisites for the further development of health care.

Complementary sources of financing

No marked changes have occurred in the complementary sources of funding, except for the increase in out-of-pocket-payments (Table 4). The latter has led to the increase in the total share of private financing. Out-of-pocket payments have increased in various ways. User charges for municipal services were

increased several times during the 1990s. Further, tax deductions for drug and other medical treatment costs were abolished in 1992. In addition to this, there have been reductions in the reimbursement of pharmaceuticals by the NHI.

There has been a slight increase in the share of private insurance owing to the slight increase in rehabilitation payments paid by private insurance companies. The small share financed by relief funds has remained about the same over the years. The relief funds are a kind of historical form of health care funding, set up by large firms in earlier times to provide additional health care for their employees. Some funds apparently still exist, but it is not known whether any new ones have been set up.

Out-of-pocket payments

Municipal health services, which are free of charge, are defined by law. A maximum out-of-pocket payment per service is defined by statute for those services where a fee is allowed. Moreover, since 2000 there has been an annual ceiling for the total amount of out-of-pocket payments a person can be charged. All the amounts and reimbursement rates mentioned in the following paragraphs are from 2001.

Ambulatory care

Services that are free of charge are: preventive health care (for example, maternity and child care); psychiatric ambulatory care; immunization; the examination and treatment of some communicable diseases specified by law (sexually transmitted diseases, tuberculosis, hepatitis and some others); treatment of respiratory arrest; medical aids such as wheelchairs and other moving aids; prostheses; transport from a health care unit to another when the treatment is continued at the other unit; and hospital treatment of those under 18 if for more than seven days in any calendar year.

In the case of services that can be charged for, municipalities are free to decide not to charge but are not allowed to exceed the maximum limits set by statute, which are given below. The majority of municipalities charge patients at the maximum rate, but there are a few that have decided to keep public health centre visits free of charge.

Municipalities may choose from two alternative ways of charging for a visit to a health centre doctor: Fmk 120 (€ 20) to cover all visits during the following 12 months, or a Fmk 60 (€ 10) payment per visit for the first three visits, with all further visits being free for one calendar year. Children under 15 years are not charged. Laboratory and X-ray examinations are included in the fees.

Dental care (currently under reform) at health centres is charged fee-for-service depending on the type of care. The basic charge for a visit to a dentist is Fmk 35 (€ 6) and a specialist dentist Fmk 70 (€ 12). In addition, preventive measures are charged Fmk 0–125 (€ 0–21) and conservative treatment Fmk 30–250 (€ 5–42); those under 19 are not charged.

In the private sector, patients pay all treatment costs themselves, but may claim partial reimbursement from the NHI. Fees for private doctors and dentists are reimbursed by the NHI up to 60% of the established basic tariff. Treatment and examination, such as laboratory tests and X-ray examinations, ordered by a private doctor are reimbursed 75% in excess of Fmk 80 (€ 13) of the established basic tariff. Private doctors and private dentists are free to set higher prices than the basic tariff, and in practice the actual fees charged by them are always higher than this. This means that the NHI reimburses around a third of actual patient fees to private doctors.

Private dentists' fees are partly reimbursed by the NHI for patients born in or after 1956 (up to 2000). The reimbursement rate for examination, preventive care and basic treatment is 60% of the established basic tariff (prosthetics and orthodontics are excluded). Patients born in or before 1955 are reimbursed 75% of the costs for dental examination and preventive care. Also, patients suffering from certain chronic diseases (when dental treatment is necessary to treat the other disease) and veterans of the Second World War are partly reimbursed for dental treatment. During 2000–2002, reimbursement for dental treatment is gradually being extended to the whole population; the reimbursement rate will be 60% of the established basic tariff.

Hospital care

The maximum fee for an outpatient visit to a doctor at a non-psychiatric hospital is Fmk 120 (€ 20) per visit. Short-term inpatient care is charged at Fmk 135 (€ 23) per day and a "basic charge" of Fmk 150 (€ 25) is levied if the length of stay is longer than three days (not for psychiatric care). The maximum fee for day surgery is Fmk 400 (€ 67). Inpatient care at a psychiatric unit is charged at Fmk 70 (€ 12) per day. Those under 18 can be charged for only seven bed-days per calendar year. An outpatient visit to a psychiatric unit is free of charge. Hospitals are allowed to set lower prices than the amounts mentioned, but in practice this does not happen.

Long-term institutionalized care is considered to be care that has continued owing to the same disease for at least three months. It is given mostly in the inpatient departments of health centres. Charges for long-term institutionalized care are determined according to a person's income. They may constitute up to

80% of the patient's income, but at least Fmk 450 (€ 76) per month must be left for personal use. Also, the financial situation of the patient's family may be taken in account when determining the charge for long-term care.

Drugs

Patients receive 50% reimbursement by the NHI for all pharmaceutical costs in excess of a fixed limit per single purchase of prescribed medication (Fmk 50, € 8). Patients with certain chronic conditions are reimbursed 75%, or 100% in excess of Fmk 25 (€ 4).

There is a maximum limit for drugs to be paid by patients per year. In 2001 this limit is Fmk 3450 (€ 580). All drug costs exceeding this limit are paid by the NHI.

Drugs administered during inpatient care are included in the daily fee.

Medical aids and prostheses

Medical aids and prostheses are generally free of charge by law. The main responsibility for providing and financing medical aids and prostheses is within the municipal health services, i.e. they are supplied either by health centres or by hospitals.

Other bodies such as the social services authorities, the Social Insurance Institution and private insurance companies also finance medical aids to their clients if the law obliges them to do so.

Others

The NHI reimburses the cost of transport in connection with the treatment and examination of a disease or accident if this exceeds Fmk 55 (€ 9). If the cost of transport paid by patients due to disease or accident exceeds Fmk 935 (€ 158) per year, the NHI reimburses all transport costs in excess of this limit.

The charges for home nursing depend on whether the patient/client is being taken care of continuously or temporarily. A temporary home visit by a health centre doctor can be charged at Fmk 60 (€ 10) and a visit by other municipal health personnel at Fmk 35 (€ 6). The charges for continuous home nursing are determined according to the kind and amount of treatment, and the solvency and size of the family.

Changes in out-of-pocket payments

The share of out-of-pocket-payments in total health care financing has been increasing. The economic recession in the first half of the 1990s forced a

reduction in public spending. The relative share of out-of-pocket payments therefore increased. Out-of-pocket payments also increased during the 1990s in absolute terms. User charges for curative outpatient services in health centres were reintroduced in 1993. Before 1993, all visits to health centre doctors had been free. Charges for health centre care have been raised several times since then. In addition to this, the NHI has reduced its compensation for numerous items, including drugs. Charges for hospital care and day surgery have also been increased a few times.

Owing to the increases in out-of-pocket payments in the 1990s, the share paid by households as user charges is rather high in Finland compared to other European countries.

There has been concern about the consequences of high fees, such as on the accessibility of services to those on lower incomes. Exemptions from user charges are not available to low-income or any other groups. In case of inability to pay, people have increasingly sought subsistence through the social welfare system.

The effects of the increases in user charges on low-income people have not been thoroughly studied in Finland, although some indication was provided by a Survey on Health and Use of Health Services in Finland ("TERVA") carried out in 1996. According to this survey, from 1987 to 1996 the share of households in the lowest income group that had had to resort to assistance from relatives or friends or to municipal support to cover their medical expenses increased from 2.1% to 8.4% (relatives/friends) and from 3.2% to 7.3% (municipalities). The share of households in the highest income quintiles who had had to resort to help from others remained about the same during the study period.

The concerns that have been raised by the high fees led to the introduction of an annual ceiling for health care costs at the beginning of 2000. The limit is set at Fmk 3500 (€ 589). It covers fees for outpatient and inpatient care at municipal hospitals and health centres, as well as day surgery. It does not cover pharmaceuticals (for which there is a separate ceiling), private health care, home nursing and certain other services. Patients are not charged for the following months in a calendar year when they have reached the set limit. However, they may be levied a charge of Fmk 70 per day for short-term inpatient care even if they have reached the ceiling.

Voluntary health insurance

Voluntary or private insurance is insignificant in Finland, and mainly includes health care costs paid out of life and accident insurance schemes. There has been a slight increase in the share of funding by private insurance over the

years. In 1980 it accounted for about 0.8% and in 1990 for about 1.7% of total health care funding. The increase occurred mainly because of the uptake of private additional insurance schemes for children to cover treatment by private doctors in acute cases. The recent increase up to 2% of total health care financing is mainly due to the increased payments for rehabilitation by private insurance companies. No major changes are expected in this area.

Health care expenditure

Health care expenditure in Finland developed as in most other EU countries until 1990, rising steadily both in absolute terms and as a share of GDP, but has since shown a distinctive pattern. At the beginning of the economic recession in 1990–1991, GDP declined markedly. This brought Finland, with 9% of GDP spent on health care, in line with two other high spenders: France and Germany.

Total health expenditure in real terms clearly dropped in the first half of the 1990s, but since 1995 it has been growing steadily again. In 1999, total health expenditure in real terms was approaching the expenditure level of 1990, although with different relative shares of financing sources, as discussed earlier (Table 5).

Table 5. Trends in health care expenditure, 1980–1999, selected years

	1980	1985	1990	1995	1996	1997	1998	1999
Total health expenditure as a % of GDP	6.4	7.2	7.9	7.5	7.7	7.3	6.9	6.8
Total health expenditure in US $PPP per capita	510	849	1 292	1 421	1 486	1 491	1 502	1 547
Health expenditure from public sources as a % of total expenditure on health	79.0	78.6	80.9	75.5	75.9	76.1	76.3	75.7

Source: WHO health for all database.

As GDP has again grown rapidly, total health expenditure as a percentage of GDP has been shrinking continuously since 1993, reaching 6.8% in 1999. Contrary to 1991, this places Finland in the bottom group within the EU, ahead only of Ireland and Luxembourg (Fig. 6). Since the late 1990s, it is also markedly below the figures of other Nordic countries (Fig. 7).

Health care expenditure in Finland in US $PPP per capita is about 20% below the EU average (Fig. 8). With that figure, it is below that of other tax-financed countries such as Italy, Sweden and the United Kingdom.

The share of funding from public sources decreased by some 5 percentage points between 1991 and 1994. This is also due to measures taken in response to the recession, i.e. the growth in public expenditure (including health care) has been much more constrained than the growth in the rest of the economy. The public sector in Finland suffered from the economic recession of the 1990s for a longer period of time than the private sector. A percentage of health expenditure from public sources of between 75% and 76% in the second half of the 1990s places Finland in a medium position among the EU countries (Fig. 9).

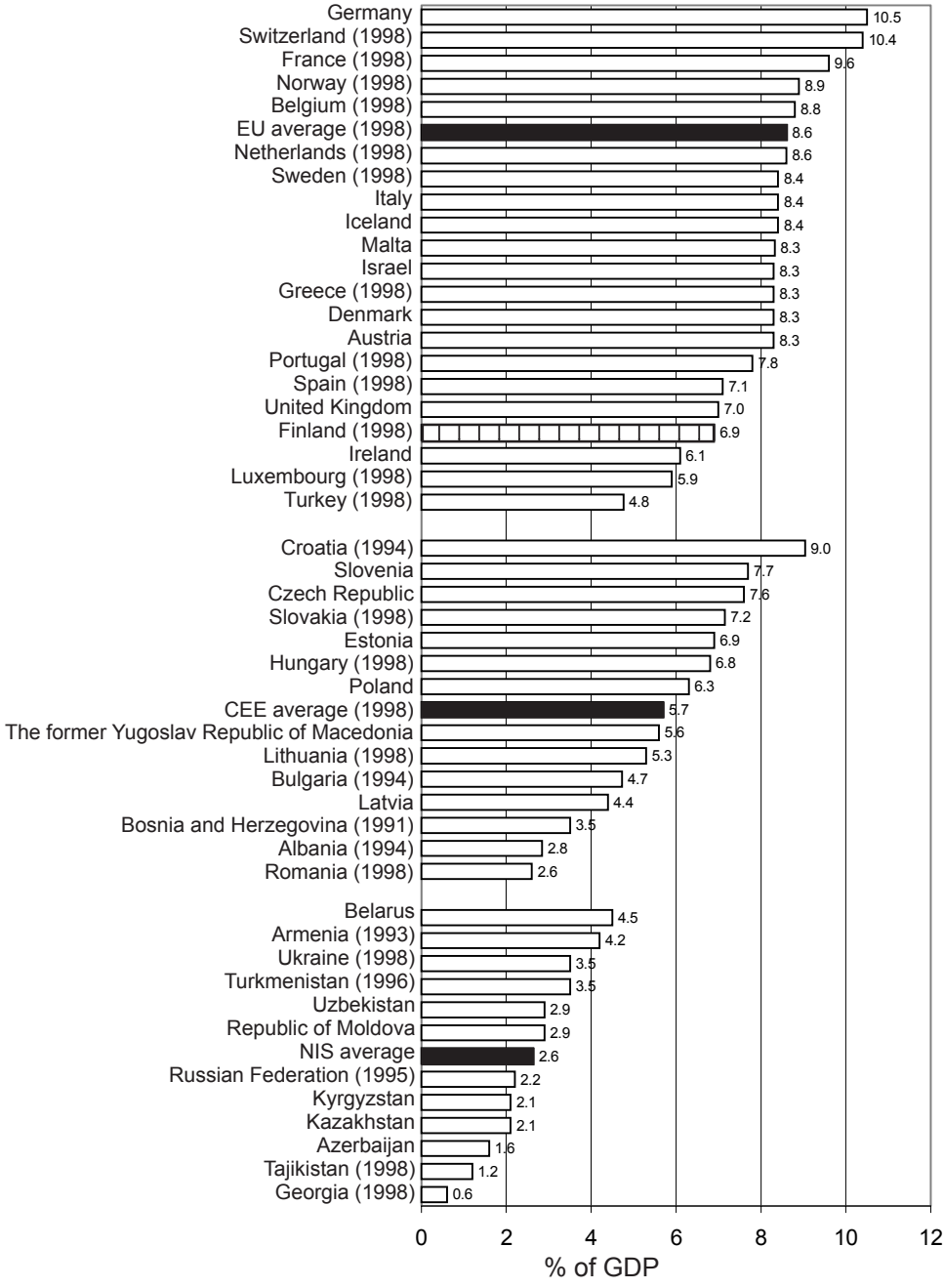
As a result of the change in the balance of care, expenditure on institutionalized care as a share of total health expenditure has decreased (Table 6). Instead, expenditure on pharmaceuticals has grown rapidly, both in real terms and as a share of total expenditure. This has occurred because of the use of new expensive pharmaceuticals and also partly because of the increased use of pharmaceuticals in general. Expenditure on administration and public investments as a share of total expenditure has remained fairly stable over the past decade.

Table 6. Health care expenditure by categories in Finland as a % of total expenditure on health care, 1980–1999, selected years

	1980	1985	1990	1995	1996	1997	1998	1999
Public expenditure on inpatient care	48.4	45.4	44.2	39.8	41.4	41.3	41.3	40.7
Total pharmaceutical expenditure	10.7	9.7	9.4	14.0	14.4	14.8	14.6	15.1
Administration	1.9	2.0	2.0	2.3	2.5	2.2	2.4	2.1
Public investments	4.9	4.7	4.6	2.8	2.7	3.2	2.7	2.8

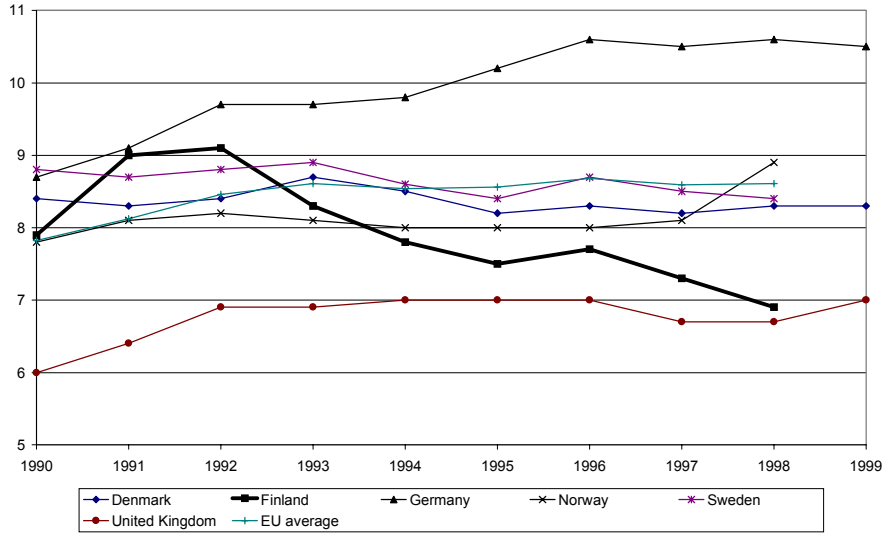
Source: WHO health for all database and Social Insurance Institution, 2001.

Fig. 6. Total expenditure on health as a % of GDP in the WHO European Region, 1999 (or latest available year)



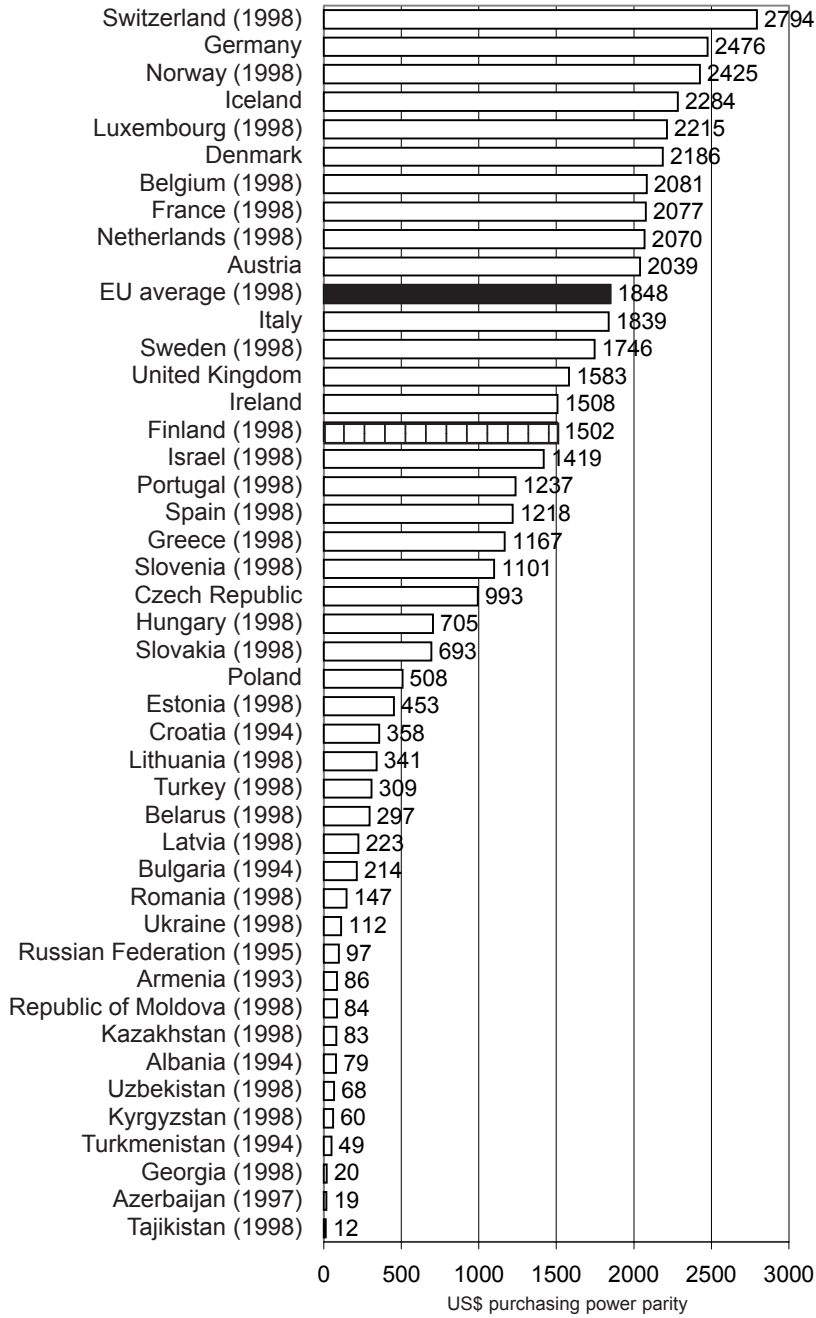
Source: WHO Regional Office for Europe health for all database.

Fig. 7. Trends in health care expenditure as a % of GDP in Finland and selected countries, 1990–1999



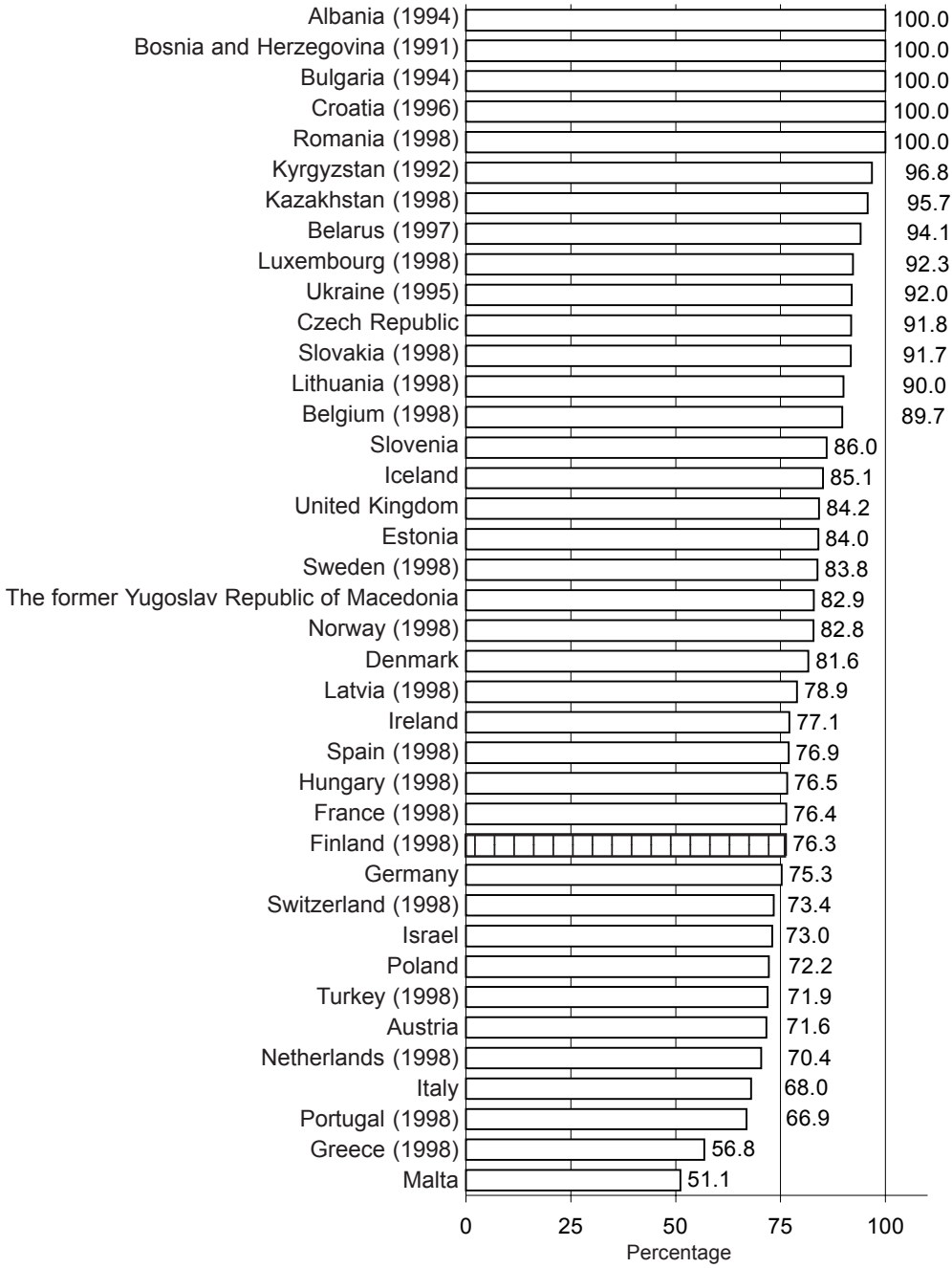
Source: WHO Regional Office for Europe health for all database.

Fig. 8. Health care expenditure in US$ purchasing power parity per capita in the WHO European Region, 1999 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Fig. 9. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 1999 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Health care delivery system

Primary health care and public health services

The present structure of delivering primary health services was created in the 1970s with the introduction of the Primary Health Care Act in 1972. The introduction of the Act was one of the major milestones in the history of Finnish health care. It took a wider perspective on the provision of primary care than just the provision of general medical treatment. The Act comprises also preventive and public health care. It obliged municipalities to provide these services to their inhabitants in what was a completely new type of a provider organization at that time, a "health centre".

Health centres

A health centre can be defined as a functional unit or an organization that provides primary curative, preventive and public health services to its population. It is not necessarily a single building or a single location where care is provided. Health centre activities are often organized at several locations; for example, maternal and child health care or school health might be provided at a separate location from the health centre doctors' office. Large cities usually have activities organized at several places. Health centres are owned by one municipality or by several municipalities together. They do not aim to make a profit, since they are publicly owned and run. Municipalities are allowed to borrow money, and may also do so for the needs of their health facilities.

There are approximately 270 health centres in the country. In sparsely populated areas such as Lapland, the distance to the nearest health centre facility is much greater than in the more densely populated south. The size of a health centre varies, depending on the number of people it serves. When health centres

were first set up, it was thought that they should serve a population of at least 10 000, but in practice many serve smaller populations than this.

The number and type of personnel in each health centre depends on the size of the population it serves and on local circumstances. The personnel consists of general practitioners, sometimes medical specialists, nurses, public health nurses, midwives, social workers, dentists, physiotherapists, psychologists, administrative personnel, and so on. All are employed by the municipalities. The number of inhabitants per health centre doctor varies, on average it is 1500–2000.

Health centres offer a wide variety of services: outpatient medical care, inpatient care, preventive services, dental care, maternity care, child health care, school health care, care for the elderly, family planning, physiotherapy and occupational health care. Legislation does not define in great detail how the services should be provided, and in most cases this is left to the discretion of the municipalities.

Health centres are usually well equipped. In addition to the doctors' and nurses' consulting rooms, there are normally X-ray facilities, a clinical laboratory, facilities for minor surgery and endoscopy and equipment such as electrocardiogram and ultrasound.

The doctors working in health centres are mainly general practitioners. Around a half of all doctors working in health centres have specialized in general medicine (six years of postgraduate training). However, it is not obligatory to be a specialist in general medicine to work as a physician in a health centre.

The main work of health centre doctors is to provide office-based general medical care to patients of all ages. They are also involved in maternal and child health care, occupational health care, family planning, inpatient care, home nursing (home visits by general practitioners are not very common; these are more often done by nurses), consultation at a municipal home for the elderly, etc. The tasks are often divided up among the health centre doctors according to the circumstances of the centre and the experience or interests of the doctors. Some health centres have arranged for specialists to come on regular consultations – for example, a radiologist from the nearby hospital to interpret X-rays.

The inpatient department of a health centre works in much the same way as a hospital department. A typical health centre has 30–60 beds. The number of inpatient departments within a health centre varies; large centres have several. The majority of the patients in these departments are elderly and chronically ill. In remote, sparsely populated areas, however, health centres provide rather comprehensive short-term curative inpatient services to the entire population.

Nurses have an essential role in Finnish health centres. There are nurses with a general nursing education who, in addition to assisting general practitioners, have their own consulting hours for giving injections, removing sutures, measuring blood pressure and so on. However, nurses do not act as a "gate-keeper" to the health centre doctor. Maternal and child care are largely carried out by public health nurses who have specific training in preventive work. In addition to maternal and child health care, they are engaged in family planning, school health care, occupational health care, home nursing and all kinds of health promotion activities.

Occupational health care at health centres is offered to those employees whose employers have elected to provide it in this way. Occupational health care is provided by one or more of the health centre doctors, along with one or several nurses. The doctor may be a specialist in occupational health care (which is a medical speciality in Finland) or have additional training in occupational health care.

Physiotherapy and rehabilitation in health centres are carried out mainly by physiotherapists on the order of a health centre doctor. They give treatment to individual patients and arrange guidance and physical exercise to groups of patients suffering from certain disorders. The health centre physiotherapy department is usually also the place that provides medical aids and prostheses.

As discussed previously, dental care is being reformed at present. By the year 2002 the entire population will have access to dental care in health centres.

Health centres often employ social workers to deal with various problems related to illness, such as helping patients to apply for benefits or arranging home help and other services needed by patients discharged from inpatient care. Health centres also work in cooperation with the municipal social services.

Psychologists may also be employed in health centres. Their work varies from consultations on the order of other health centre workers to prevention, such as work with children and schools. However, outpatient care for the mentally ill is normally organized at the outpatient departments of psychiatric hospitals and at separate clinics (so-called mental health offices, explained in more detail later). The latter can also be part of health centres.

Health centres do not have a pharmacy for the sale of prescription drugs to patients. Health centres have a store of pharmaceuticals for their own use: for minor surgery, for inpatient departments and for acute cases at night when pharmacies are closed. Patients are given drugs as part of their inpatient care, but drugs for use at home are bought from private pharmacies.

The management of health centres varies. Usually, the head of a health centre is the chief physician, but in large and middle-sized centres the management

often includes several leading persons. There are often several chief physicians accountable to the medical director, one or several chief nurses and one director of finance and/or administration.

If a patient wants to make an appointment to a health centre doctor, he or she is assigned either to the doctor he or she wishes to see or to any doctor who is available. In the "population responsibility model", the patient is usually assigned to the doctor responsible for the care of his or her population area. This means there is not always much choice of general practitioner, also because small units have few physicians. However, if a patient wishes to change his or her doctor within the health centre, this can usually be arranged.

In the public sector, patients need a referral from their health centre doctor or any other licensed physician in order to get access to the outpatient or inpatient department in a specialized care hospital. Around 5% of visits to a health centre doctor lead to a hospital referral. About 56% of referrals to central hospitals and 65% of those to district hospitals come from health centre doctors. Most of the remaining referrals come from other hospitals' doctors and private doctors. Around 30–40% of patients who access specialized care do so through the hospital emergency units as acute cases. In the private sector, there is direct access to private specialists and either private general practitioners or specialists can refer to public hospitals.

In general, patients cannot choose the hospital where they will be treated. In practice, however, travelling distance limits the choice. Moreover, health centres have guidelines on where patients with certain symptoms and diagnoses should be sent. In hospitals, the possibilities for patients to choose their doctor depends on, for example, the organization of departments and the number of specialists.

It is under discussion as to how patients could be given more possibility of choosing their doctor and hospital. It is also being discussed whether patients should be allowed to see a health centre doctor outside their own municipality while leaving the financial responsibility to their own municipality. As yet, this depends on mutual agreements between health centres (except, of course, in an emergency).

Both primary health care physicians and hospital specialists may work in the private sector in addition to their work in the public sector. About one third of all doctors (both general practitioners and specialists) have some kind of part-time private practice. In 1999, only 8% of all doctors worked full time in private practice. There is no need for an agreement between doctors and the NHI; this means that any patient treated by any licensed medical doctor is partly reimbursed by the NHI (reimbursement rates are explained above).

Issues and reforms in primary health care

After the 1972 Primary Health Care Act came into force, priority was given to financing the establishment of health centres in the remote and rural areas. These areas were poorer than the urban areas and also lacked private health services. As a result, the development of municipal health centres was first more rapid in rural areas than in the larger cities. By now, primary care services, as envisaged by the Primary Health Care Act, are available everywhere in the country.

By the 1980s, although an increasing amount of resources had been allocated to primary care, problems of access to health centre doctors and of continuity of care were particularly apparent in the larger cities. Waiting times to see a health centre doctor were often 2–6 weeks for non-urgent cases. Doctors were often busy when on call, however, so that only the most acute problems could be dealt with. It was difficult for health centre doctors to feel a real personal responsibility for patients' care, and continuity of care suffered since patients would usually see another doctor on their next consultation.

To overcome these problems, a number of projects were launched in the 1980s. One was the development of the personal doctor system in some municipalities. In this system, a person or a family is always assigned to the same health centre doctor. In addition to the initiatives in municipalities, a project was carried out between 1988 and 1993 in which 17 private doctors in large cities each acted as a personal doctor for a population of 1600–3100, a total of 40 000 persons (the project was not continued).

In the personal doctor system, doctors have to organize their practice so that patients on their list are able to see them within three days. Doctors can decide on such things as their own working hours, but not the work of other personnel. The method of payment of doctors has also been altered, to relate better (than a fixed monthly salary) to the workload, expertise and experience of the doctor and the population structure he or she is responsible for (payment of personal doctors is explained elsewhere). Doctors in this scheme remain public employees.

The results of the personal doctor projects in health centres were encouraging. Access to general practitioners was improved and waiting times were clearly reduced; in the majority of cases the waiting time target of three days was achieved. According to some surveys, average waiting time was 4.4 days compared to 8.3 days in municipalities with the "traditional" system. About 90% of patients were satisfied with the services they received within the personal doctor system.

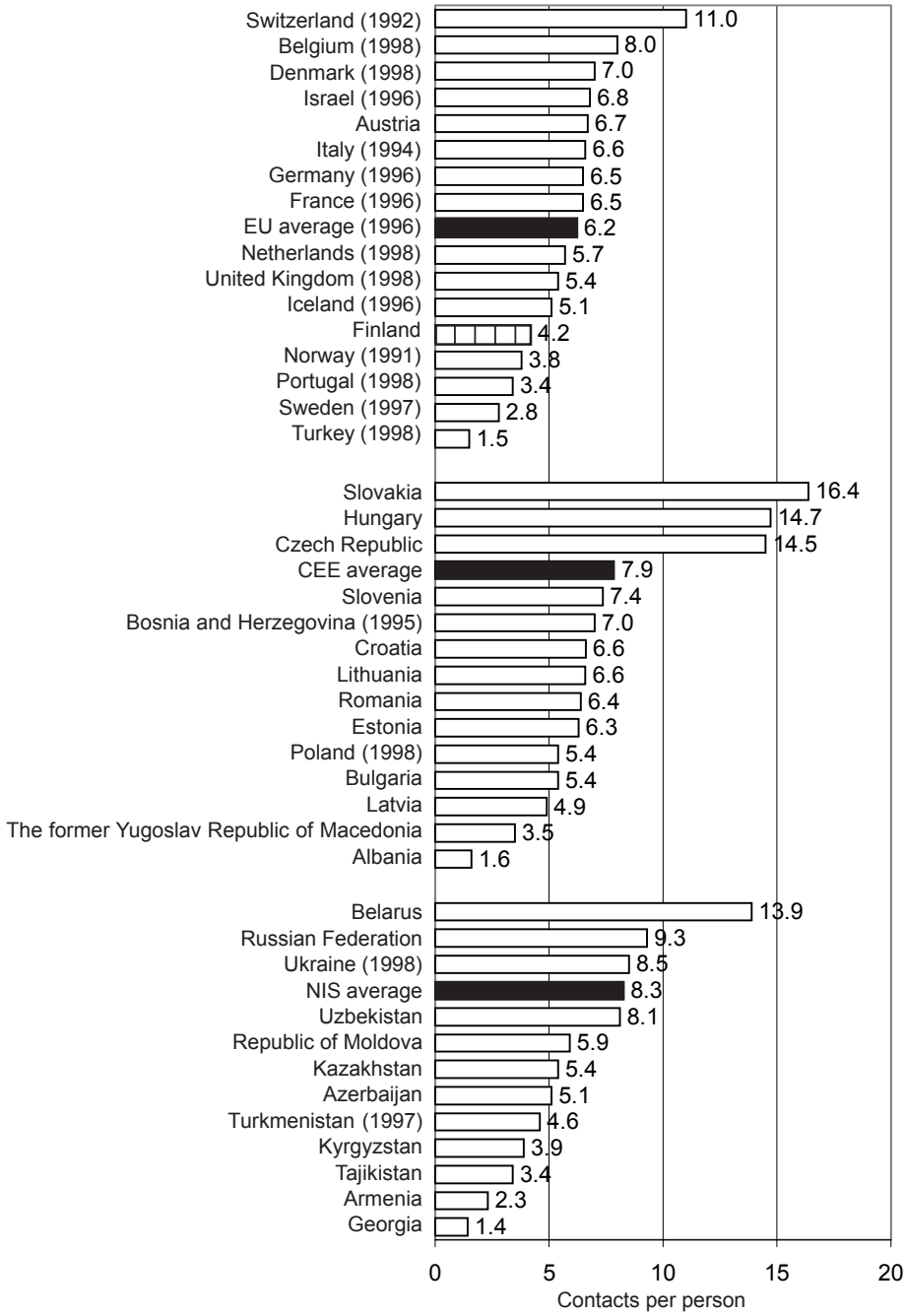
The experience and results of the personal doctor system contributed to a further development in health centres. Nowadays, the personal doctor system has been developed into a model called *väestövastuu* in Finnish: "population responsibility". Collaboration between different health care personnel has been encouraged in this model: doctors and nurses form a team that is responsible for the care of a geographically defined area covering 1500–5000 persons. The teams are not financially responsible, so they cannot be considered to be general practitioner fundholding groups or primary care groups such as those in the United Kingdom.

Most health centres are now moving towards the principle of population responsibility. In some municipalities the size of the population covered is so small that the principle of population responsibility already exists. At present, about 55% of the population receive primary care services according to the "population responsibility" principle, either by being covered by the scheme or by living in a small municipality with fewer than about 2500 inhabitants.

The number of outpatient contacts per person in Finland is among the lowest in the EU (Fig. 10). This may be due to the fact that patients are not asked to come for a check-up as often as in other countries. In part this may be due to different medical traditions, but it is likely that the payment system for doctors does not create such an incentive for further visits as the fee-for-service payment system existing in insurance-based systems. The important role played by nurses, midwives and public health nurses is probably also a reason for the low number of contacts with physicians in Finland. Nurses and midwives may carry out tasks that their colleagues in other countries may not do, especially in the field of maternal and child health.

An action programme for structural reorientation in the social and health service system was carried out in the 1990s to reduce institutional care at all levels of the system. The main objective of the programme was to develop those forms of services that would enable elderly and other persons in need of care to live in their homes for as long as possible. The Ministry of Social Affairs and Health directed and coordinated the process of transferring resources from institutional care to outpatient services. From the very beginning it was perceived that the actual decisions should be made at the local level in the municipalities. The Provincial State Offices and the Association of Finnish Local and Regional Authorities were also involved in this process. The objectives were widely accepted by the municipalities and the change went in the desired direction. Nevertheless, the pace of change differed in different parts of the country. A number of municipalities made successful changes to their service delivery system while others advanced less.

Fig. 10. Outpatient contacts per person in countries in the WHO European Region, 1999 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.
CEE: central and eastern Europe. NIS: newly independent states of the former USSR.

In general, institutionalized care was reduced in the whole country, mainly due to the more extensive use of outpatient services. The original targets were to reduce non-psychiatric specialized care to 1.2 bed-days per inhabitant, psychiatric care to 0.5 bed-days per inhabitant and primary care inpatient provision (inpatient care at health centres and homes for the elderly) to 2.3 bed-days per inhabitant. These targets seem to have been achieved in specialized care but not at the primary care level, i.e. at health centres and homes for the elderly. According to preliminary calculations, non-psychiatric care was reduced to 1.0 bed-day, psychiatric care to 0.4 bed-days and primary care inpatient provision to 3.3 bed-days per inhabitant (in 1998). If the occupation rate was assumed to be 90%, there were 15 500 beds in excess of the targets set for inpatient care at health centres and homes for the elderly.

During the process it became obvious that if apartments and supported housing services were not available, it was impossible to reduce institutionalized care. Institutionalized psychiatric care was reduced, but sufficient substitute services in outpatient and rehabilitation services were not developed for psychiatric patients. The quantity and quality of psychiatric services is now the subject of growing attention.

Public health services

At the national level, the Ministry of Social Affairs and Health is concerned with protecting and promoting public health. The department for promotion and prevention within the Ministry directs and develops preventive social and health care. It is responsible for health protection, environmental health and chemical affairs, and products (tobacco and alcohol) control. Several agencies and institutions subordinate to the Ministry carry out some of these tasks. Legislation on health protection as well as legislation on foodstuffs has been changed to conform to EU requirements.

The Finnish health centres have an important role in providing public health services at local level. Maternal and child health care and school health care provided by health centres are central to preventive health services. Maternal and child health care had a strong tradition in Finland even before the establishment of health centres. Partly owing to the comprehensive network of maternal and child health care services and the great emphasis placed on them, infant mortality in Finland is one of the lowest in the world.

The general immunization programme in Finland covers the whole population. It starts with child health care in health centres and is continued in schools. High immunization coverage rates have been achieved for tuberculosis, poliomyelitis, tetanus, diphtheria, measles, mumps, German measles and haemophilia. In the case of measles, for example, the immunization coverage

is about 99% of the total population, the second highest level of immunization against measles in western Europe (Fig. 11). According to a recent study, over 95% of children are completely immunized when they reach the age of two years.

Municipalities are obliged by statute to provide breast cancer screening for all women between the ages of 50 and 59, and cervical cancer screening for women aged 30–60 years. Municipalities often buy these services from a private provider. The vast majority of Finnish women participate in the screening programmes, although less eagerly than in the past. Other screening programmes are not routinely carried out nationally.

Health education is carried out by the health care system, by schools and by various voluntary organizations representing different patient groups. Central issues in health education are smoking, nutrition, physical exercise and reproductive health. The Ministry of Social Affairs and Health also supports health education through a specific grant for this purpose. These funds come from a small share of the total tobacco excise tax and provide an important part of health promotion funding.

Efforts have been made to reduce the consumption of harmful products. This has partly been achieved by taxation, which has kept the prices of alcohol and tobacco at a high level. As in most other Nordic countries, the sale of alcohol has been a state monopoly, making it possible to regulate prices and sales. However, as Finland is now a member of the EU, pricing and licences to sell alcohol have to be discussed within the EU in future.

Campaigns, pricing and legislation have been used to reduce smoking. There is strict legislation that aims to minimize passive smoking by prohibiting smoking in almost all public places. It also is intended to reduce smoking among children and young adults, and the sale of tobacco to children under 18 has therefore been prohibited.

Dietary habits are influenced through health education and through other measures. The food industry is increasingly taking recommendations on healthy nutrition into account in its product development. For example, the supply of milk products with a low percentage of animal fat has widened and the use of vegetable oil has increased. Healthy nutrition has also been supported by legislation. In 1993, a statute came into force defining the salt content of the most important foodstuffs. Those exceeding the defined salt content must be marked "strongly salted" while those containing less than the defined content can be marked "slightly salted".

The control and follow-up of communicable diseases is defined by legislation and by regulations of the Ministry of Social Affairs and Health. The National Public Health Institute has made recommendations concerning the follow-up

Fig. 11. Percentage of children immunized against measles in countries in the WHO European Region, 1999 or latest available year (in parentheses)

Source: WHO Regional Office for Europe health for all database.

and prevention of communicable diseases. The Institute also reports on communicable diseases to health authorities, health care providers, the mass media and the general public.

The National Public Health Institute and the hospital districts maintain communicable disease registers. Doctors are obliged to report on certain communicable diseases, including tuberculosis, diphtheria, hepatitis, malaria, HIV, poliomyelitis, cholera and rabies. Also, microbiological laboratories report any occurrence of infectious diseases and related observations.

The prevention of sexually transmitted diseases (STDs) is based on the detection of all those infected and on easy access to treatment. Treatment is therefore free of charge. All those possibly infected are to be traced and directed to a health centre or elsewhere to receive treatment. The largest cities have separate STD clinics, but otherwise treatment is provided as part of the health centre services.

Finnish public health policy has been particularly successful in some areas. Efforts have been made to reduce mortality and risk factors related to cardiovascular diseases, which have been major national diseases owing to smoking, excess alcohol consumption, unhealthy diet, lack of physical exercise and possibly some genetic factors. More efficient treatment and early diagnosis of coronary heart disease and other cardiovascular diseases have also played a role in the reducing mortality. Active campaigns and education on nutrition and lifestyle factors have been carried out by health professionals, health authorities and voluntary organizations.

The prevalence of cardiovascular diseases among men in the eastern parts of Finland has been higher than in other parts of the country and is one of the highest in the world. In 1972 the North Karelia project was launched in the eastern province of North Karelia in response to a local petition to reduce the high levels of heart disease. The planning was done by national experts, but also involved representatives from North Karelia and experts from the World Health Organization. The project was integrated as far as possible into the local service system and social network. Various methods were used in the project: provision of general information and health education (through materials, mass media, meetings, campaigns, etc.); development of referral and screening procedures in health services; encouragement of environmental changes (such as smoking restrictions, promoting vegetable growing, collaborating with food manufacturers); preventive work directed at children and young people; training and education of health personnel; and monitoring of the results. Much of the practical work was carried out by various bodies in the community itself, coordinated by hospitals and health centres.

The original project period lasted from 1972 to 1977, but it continued operating beyond this period until the end of the 1990s, and the activities were extended to other parts of the country. Since the very beginning, the project has undergone careful evaluation. The monitoring systems originally developed for the North Karelia project were adopted over the years as a national monitoring system.

The changes in lifestyle and in the reduction of other risk factors over the last 20 years have been considerable. Both in the male and in the female population, average serum cholesterol levels and average blood pressure have declined. Especially in men, smoking has fallen markedly. The reduction in risk factors was reflected in a fall in death rates from cardiovascular diseases. At the beginning of the 1990s, male mortality from coronary heart disease was about 60% lower than at the beginning of the 1970s, and mortality from other cardiovascular diseases was also lower.

It should be noted that similar efforts to reduce the prevalence of and mortality from cardiovascular diseases have been made elsewhere in the country. Developments in risk factors and mortality elsewhere in the country have been along the lines of those in North Karelia.

Family planning and dental care for children in the Finnish public health care system deserve a particular mention. The abortion rates in Finland are rather low, despite a liberal abortion law. The reason is probably the comprehensive family planning services provided by health centres and health education directed at young people. Another success story in public health care is preventive dental care, covering all children and young adults.

Environmental health care

Environmental health care in Finland consists of various areas: the quality of household and recreational water, the healthiness of apartments and public facilities, indoor air, noise diminution, health aspects of waste management, and the quality and hygiene of foodstuffs. Furthermore, surveillance of gene technology, chemicals control and protection from radiation are included under environmental health care. Responsibilities related to environmental health are divided between different public authorities. At the national level the Ministry of Social Affairs and Health is responsible for matters related to environmental health. The primary responsibility for environmental health care, however, is devolved to the municipalities.

Secondary and tertiary care

Secondary and tertiary care are provided in hospitals, through outpatient and inpatient departments. The range of specialized care varies according to the type of hospital. There are 5 university hospitals, 15 central hospitals and around 40 other smaller specialized hospitals (here referred to as "district hospitals"). These all are owned by federations of municipalities, i.e. hospital districts. There are only a few private hospitals, providing less than 5% of the hospital days in the country. The state owns two psychiatric hospitals, which are subordinate to the National Research and Development Centre for Welfare and Health.

The executive management of hospitals usually consists of a chief physician, a chief nurse and a director of finance (and/or administration), but there are variations, with larger hospitals having a more complex management structure. Hospital managers are accountable to the council of the hospital district.

The administrative decision-making body of a hospital district is typically a council whose members are appointed by each municipality, a board appointed by the council and an executive management. The council meets a couple of times a year, while the board generally meets monthly. The executive management consists of 2–6 permanent appointed officials (for example, the hospital district director, a medical director and a nursing director). Normally the administrative structure of a hospital district is slim and does not comprise many people.

Publicly owned hospitals do not aim at making a profit. Hospital assets are owned by hospital districts. Hospital districts, like single municipalities, are allowed to borrow money.

At the beginning of the 1990s, the number of hospital beds was 11.5 per 1000 inhabitants, while those in short-term care amounted to about 5 per 1000 inhabitants (Table 7). The latter figure was below the EU average but higher than in other Nordic countries (Fig. 12). During the 1990s, the number of all hospital beds declined by one third to 7.6 per 1000. At present, there are about 38 000 beds in hospitals owned by municipalities. The number of beds in private hospitals is about 1400. The number of beds in short-term care decreased even more to 2.5 per 1000, so that towards the end of the decade Finland (together with Sweden) had the lowest number of hospital beds in the Nordic countries.

As a result, there is still excess capacity in terms of physical facilities for hospital care. In 1996 it was estimated that excess facilities covered some 16 hectares; now, the area may be even larger. The excess facilities are often located

in remote areas far away from major cities, and they are often technically unsuited to present-day treatment. Other uses have been found for some of them, but for some no use has been found.

In contrast to hospital beds, the number of admissions rose in the 1990s by about 20% for all hospitals (to 27.3 per 100 population) and by about 10% for short-term care hospitals (to 19.7). During the same period, the average length of stay fell by around 40% both in all hospitals (to 10.5 days) and in short-term care hospitals (to 4.5). Compared to 1980, the average length of stay halved, both for all hospitals and for acute care only. The reductions have been similar in all hospitals. In 1999, the average length of stay at central hospitals varied from 3.3 to 4.7 days, and at district hospitals from 3.4 to 5.3 days.

The reason for these reductions in length of stay is more efficient medical treatment. This has been made possible by new medical technology and the introduction of new outpatient treatment procedures (for example, day surgery and other treatment), and earlier discharge from hospital to home care, health centres and home nursing. However, the comparison of changes in the average length of stay is somewhat problematic nowadays, because day-care procedures shorten average lengths of stay considerably.

The number of bed-days has decreased. In 1999, for example, 30% fewer bed-days were needed than in 1990 for treating 10% more patients in short-term care. Admissions and bed-days do not, however, mean the same thing as they did 10 or 15 years ago. New treatment methods have changed the "nature" of a hospital stay. A bed-day at a hospital nowadays is much more treatment-intensive and different in content from what it used to be.

Bed occupancy rate in all public hospitals in the 1990s varied from 80% to 90% in inpatient care in all hospitals and from 70% to 80% in short-term inpatient care (i.e. inpatient care in health centres excluded).

Table 7 summarizes the main trends in hospital indicators over the last twenty years.

Compared with western European as a whole, the reduction in short-term hospital beds in Finland was steeper than in most other countries (Fig. 13). In 1999, the number of hospital admissions in short-term care was among the highest, while average length of stay showed one of the lowest values (Table 8).

The total number of outpatient visits in specialized care increased in the 1990s, but towards the end of the decade there was a slight decrease in the number of outpatient visits. This is true both for psychiatric and non-psychiatric specialized care.

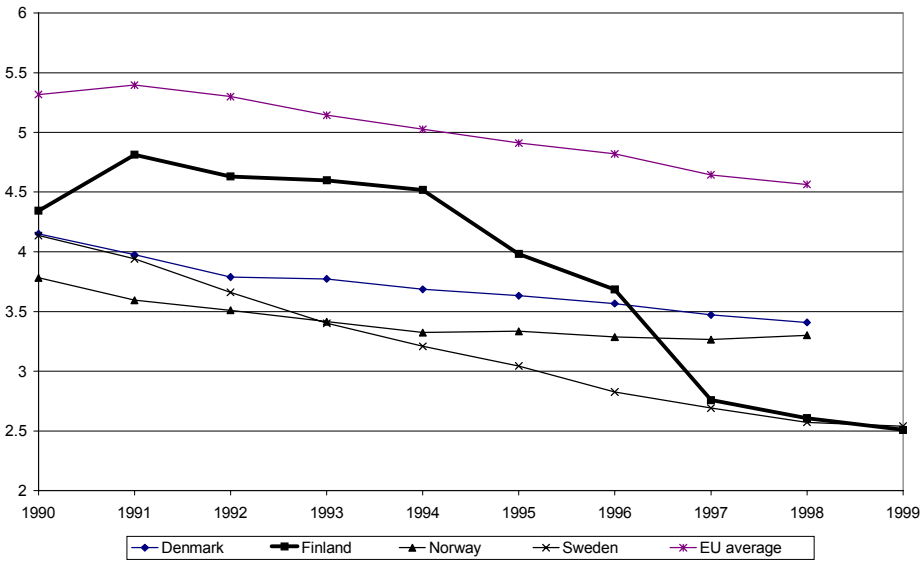
Day surgery is used on average in 40% of all elective surgery. It has also resulted in reduced waiting times for some surgical procedures. However, there are still considerable local variations in waiting times for specific surgical

Table 7. Inpatient and acute care utilization and performance, 1980–1999, selected years

	1980	1985	1990	1995	1996	1997	1998	1999
Total hospital beds per 1000 population	–	12.6[a]	11.5	9.3	7.8	7.6	7.4	7.6
Acute beds per 1000 population	4.9	4.8	4.3	4.0	3.7	2.8	2.6	2.5
Inpatient care admissions per 100 population	21.0	22.6	22.4	24.7	26.8	26.7	26.8	27.3
Acute care admissions per 100 population	–	16.4	18.0	19.4	21.0	21.0	21.0	19.7
Average length of stay in days, all hospitals	21.6	19.9	18.2	12.1	11.6	11.0	10.9	10.5
Average length of stay in days, acute care hospitals	8.8	8.0	7.0	5.6	5.3	5.0	4.7	4.5
Inpatient care occupancy rate (%), all hospitals	–	76.9	74.2	74.1	–	–	–	–

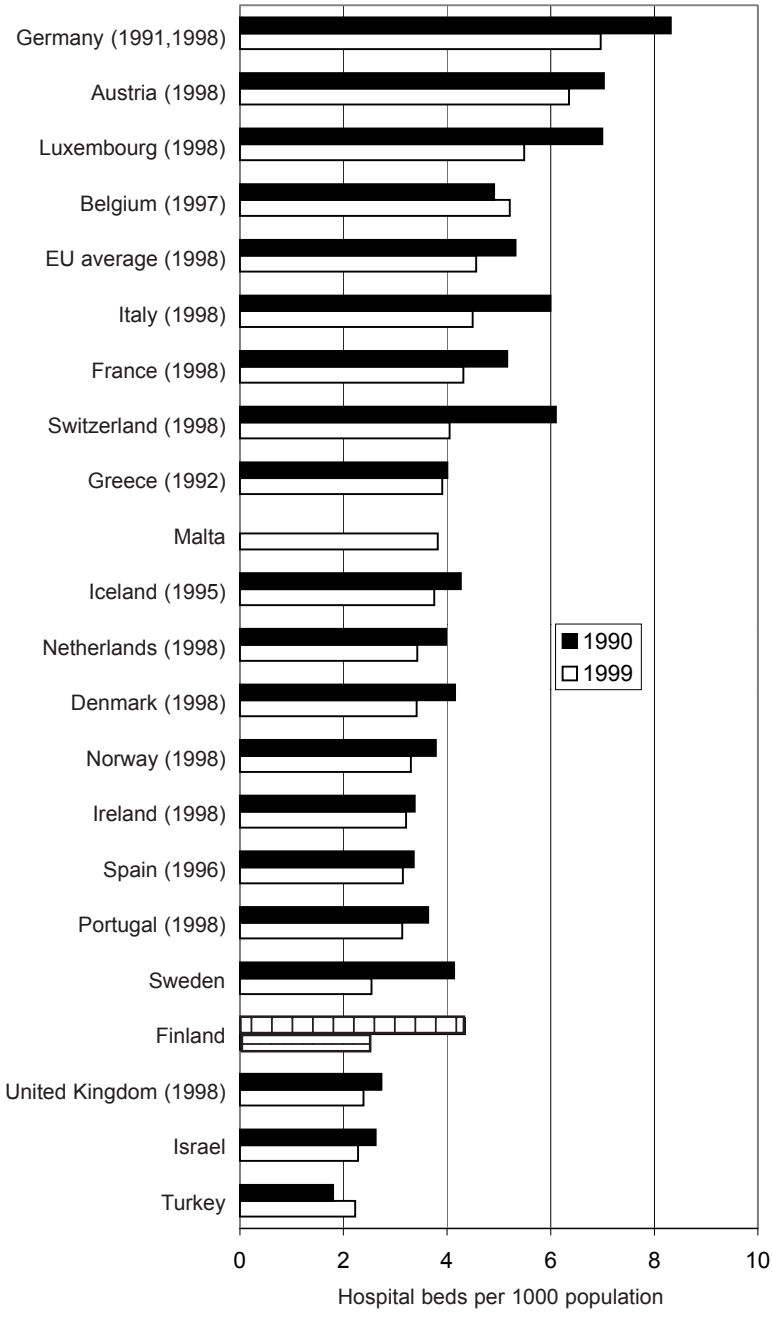
Source: WHO Regional Office for Europe health for all database.
[a] 1986.

Fig. 12. Trends in acute-care hospital beds per 1000 population in Finland and selected countries, 1990–1999



Source: WHO Regional Office for Europe health for all database.

Fig. 13. Hospital beds in acute-care hospitals per 1000 population in countries in western Europe, 1990 and 1999 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Table 8. Inpatient utilization and performance in acute hospitals in the WHO European Region, 1999 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Austria	6.4[a]	25.8[a]	6.8[a]	75.4[a]
Belgium	5.2[b]	18.9[c]	8.8[b]	80.9[c]
Denmark	3.4[a]	18.7	5.7	78.3[a]
Finland	2.5	19.7	4.5	74.0[d]
France	4.3[a]	20.3[d]	5.6[a]	75.7[a]
Germany	7.0[a]	19.6[b]	11.0[a]	76.6[b]
Greece	3.9[g]	–	–	–
Iceland	3.8[d]	18.1[d]	6.8[d]	–
Ireland	3.2[a]	14.6[a]	6.8[a]	84.3[a]
Israel	2.3	17.9	4.3	94.0
Italy	4.5[a]	17.2[a]	7.1[a]	74.1[a]
Luxembourg	5.5[a]	18.4[e]	9.8[c]	74.3[e]
Malta	3.8	–	4.2	79.3
Netherlands	3.4[a]	9.2[a]	8.3[a]	61.3[a]
Norway	3.3[a]	14.7[c]	6.5[c]	81.1[c]
Portugal	3.1[a]	11.9[a]	7.3[a]	75.5[a]
Spain	3.2[c]	11.2[c]	8.0[c]	77.3[c]
Sweden	2.5	15.6[a]	5.1[c]	77.5[c]
Switzerland	4.0[a]	16.4[a]	10.0[a]	84.0[a]
Turkey	2.2	7.3	5.4	57.8
United Kingdom	2.4[a]	21.4[c]	5.0[c]	80.8[a]
CCEE				
Albania	2.8[a]	–	–	–
Bosnia and Herzegovina	3.3[a]	7.2[a]	9.8[a]	62.8[d]
Bulgaria	7.6[c]	14.8[c]	10.7[c]	64.1[c]
Croatia	3.9	13.2	9.4	87.2
Czech Republic	6.3	18.2	8.7	67.7
Estonia	5.6	18.4	8.0	69.3
Hungary	5.7	21.8	7.0	73.5
Latvia	6.3	20.0	–	–
Lithuania	6.4	20.6	9.1	78.8
Poland	–	–	–	–
Romania	–	–	–	–
Slovakia	7.0	18.4	9.6	69.8
Slovenia	4.6	16.0	7.6	73.2
The former Yugoslav Republic of Macedonia	3.4	8.8	8.8	63.0
NIS				
Armenia	5.5	5.6	10.4	29.8
Azerbaijan	7.5	4.7	14.9	30.0
Belarus	–	–	–	88.7[e]
Georgia	4.6	4.7	8.3	83.0
Kazakhstan	5.8	14.0	12.3	92.6
Kyrgyzstan	6.1	15.5	12.8	92.1
Republic of Moldova	6.8	14.4	14.0	71.0
Russian Federation	9.0	20.0	13.7	84.1
Tajikistan	6.1	9.4	13.0	64.2
Turkmenistan	6.0[b]	12.4[b]	11.1[b]	72.1[b]
Ukraine	7.6[a]	18.3[a]	13.4[a]	88.1[a]
Uzbekistan	–	–	–	–

Source: WHO Regional Office for Europe health for all database.
Note: [a] 1998, [b] 1997, [c] 1996, [d] 1995, [e] 1994, [f] 1993, [g] 1992.

procedures. One of them is cataract surgery, where the waiting time may vary from less than a month to two years; another is hip or knee replacement, where the waiting time may vary from 1–2 months to a year.

Primary and secondary care are not always very well coordinated. Health centres do not always get sufficient information about the treatment of patients after their referral to hospital. It has been suggested that one person, for example the personal doctor, should have a better overall view of patients when they are treated at different levels of the health system. The issue of continuity of care as well as the importance of the personal doctor have been raised in various national health policy documents. Continuity of care is also a central issue in the health care 2000 development project.

Psychiatric outpatient care is provided by the outpatient departments of psychiatric hospitals as well as the so-called mental health offices. Mental health offices work under the management of psychiatric hospitals and are staffed by psychiatrists, psychologists, psychiatric nurses and social workers, among others. A number of mental health offices have been transferred to the administration of health centres in recent years, but there has been no systematic national policy to do so.

Supporting outpatient services for long-term psychiatric patients comprise residential homes, rehabilitation homes, shared apartments, day hospitals and day-care centres, sheltered housing, and so on. Which organization provides these services varies from region to region; sometimes it is the municipal social or health service system, sometimes the private sector or nongovernmental organizations, and sometimes specialized psychiatric hospitals.

Developments in psychiatric inpatient care have, in some aspects, been similar to those in non-psychiatric care. The average length of stay decreased from 109 days in 1990 to 46 days in 1995 and further to 30 days in 1999. The reductions have occurred partly due to new pharmaceuticals and partly due to active measures to reduce institutionalized care.

There were changes in the balance of care during the 1990s: many long-term patients were transferred from institutionalized care to outpatient care and to services that are "in between", such as supported housing. Also, some psychiatric care began increasingly to be provided by the primary care system. The number of beds in psychiatric hospitals was around 8500 at the beginning of the 1990s and 5500 at the end of 1998. This means that some resources were shifted from inpatient care to outpatient care. However, the supply of outpatient psychiatric services, as well as other supportive services and intermediate services, were not increased to the same extent as beds had been reduced. According to some estimates, expenditure on specialized care, both psychiatric and non-psychiatric, was reduced by about Fmk 1.6 billion (€ 269 million)

between 1991 and 1994. The bulk of this amount seems to have been realized in psychiatric care. National data registers do not contain sufficient and reliable data on the number of personnel, other resources and activities in psychiatric outpatient care and other supportive services. It is thus difficult to obtain an exact picture of the present situation of psychiatric outpatient services and services that are "between" institutionalized and outpatient services (for example, day-care hospitals, service houses and rehabilitation homes).

Psychiatric services have now been raised as a priority area in the Finnish health care system.State subsidy was increased in 2001 for improvement of psychiatric services. Guidelines for psychiatric care have been recently published by the Ministry of Social Affairs and Health and the Association of Finnish Local and Regional Authorities.

Social care

The provision of social services is the responsibility of the municipalities. Social services comprise such services as children's day care, child welfare, care for the elderly, home help services, income support (social assistance), and services for the disabled and substance abusers. As with the health services, the social services are financed from municipal taxes, state subsidies and user charges. The state subsidies for social services are also paid to municipalities prospectively according to need. The criteria for social services are the number of inhabitants, the age and economic structure, and unemployment within the municipality.

The majority of patients receiving long-term care are elderly (almost 90% are over 65). Long-term care of the elderly is mainly provided in the inpatient departments of health centres and homes for the elderly. The majority of homes for the elderly are owned by municipalities, but there is also a number of private homes and homes provided by nongovernmental organizations. Health centres work closely with municipal homes for the elderly; for example, a health centre doctor takes care of the medical treatment once or twice a week.

The disabled are also offered special residential services and other services by the municipalities. Legislation requires that disability services must be provided according to the need in a municipality, and that the disabled have a right to certain services.

Other long-term services for the elderly and the disabled include home-help services, home nursing, day hospitals and other day-care centres, part-day nursing and so-called service houses. In service houses, elderly and disabled people live in their own apartments but are offered different kinds of service

such as meals, nursing and other help needed for daily living. Various health and social policy documents have stressed support for the elderly and disabled living in their own homes. This is the preferred alternative of the people themselves. As a result, an effort has been made to improve the supply of support services offered to the elderly and disabled in their homes.

As with other social and health services, however, care for the elderly and disabled suffered greatly from the severe economic crisis of the 1990s. In many cases, there have been cuts in resources and thereby reductions in services. For example, the number of persons using home-help services for those aged 65 and over dropped by 42% between 1988 and 1998. Actually, those using home-help services are getting older and needing more and more help. Therefore, help is concentrated on those most in need. There have been similar reductions in other services delivered at home. Also the number of beds at nursing homes for the elderly fell by almost 30% in the ten-year period mentioned above. The only form of service provision that has been extended is the service houses, where the number of clients has increased by about 170%. The initial level of provision of service houses was very low, however. Also, inpatient care at health centres has grown, with a 15% growth in long-term beds.

The changes in the provision of services for the elderly is worrying, because the population in Finland is aging and there is a clear need for a system that supports people living alone and provides care for the elderly. The changes and need for services have been similar in mental health services.

As a consequence, new measures have been launched for the care of the elderly. One of these has been the publication of national quality guidelines for elderly care. The quality guidelines help municipalities to assess the realization of targets set for such care. They are recommendations rather than rules that would oblige municipalities. The quality guidelines, for example, recommend that municipalities should define the number of personnel sufficient for each service. The general need of persons for help, the need for personnel with special skills (such as for patients with dementia and with mental health problems), the facilities and the average age of staff should be taken into account when defining the personnel for elderly care. The recommendation, moreover, states that each municipality should include a strategy for elderly care in its municipal plan of action.

Another topic raised for discussion is long-term care insurance. A task force was set up to study the possibilities of introducing such insurance. The task force considered that care insurance could be a means of supplementing public services, and an additional option for financing the future costs of elderly care. The task force stated in its report that a voluntary care insurance would increase choice for the elderly in arranging care for themselves. Reimbursable services

would be private care services, improvements to homes, medical aid devices, and private long-term care. The insurance premiums for voluntary care insurance would not be tax-deductible. No measures have been taken to introduce long-term care insurance that depends on private insurance companies.

Human resources and training

The Ministry of Education is responsible for the education and training of health personnel in Finland. Medical doctors are trained at five universities. Basic medical education lasts six years and contains a lot of guided practical training. Basically, universities are free to decide on the numbers of students to be taken in. In practice, the Ministry of Education and the universities reach agreement on the budget and the numbers of students to be taken in (the Ministry of Education also consults the Ministry of Social Affairs and Health on student numbers).

Two years of practical work and training is required, both in hospitals and in health centres, to obtain a licence to practise independently. Part of this training may be completed in the private health care sector, depending on the approval of the medical faculty, or by doing research. After obtaining a licence, doctors may continue working at a health centre, specialize in one of the numerous medical specialties or establish a private practice.

Doctors must register with a faculty of medicine for the relevant specialist training programme. Specialization lasts 5–6 years depending on the speciality. To obtain a specialist diploma, a specified amount of theoretical studies is required and a national examination has to be passed in addition to the required amount of clinical work. Specialization starts after graduation, with the student working as a hospital doctor at a central or district hospital under the supervision of an experienced doctor. After that at least one to two years working at a university hospital and structural training programme is required for most medical specialties.

During this time theoretical and other complementary training is organized by the medical faculties and universities, hospitals, the various medical associations, pharmaceutical companies and other organizations. The training offered by the various organizations may be accepted by medical faculties as part of theoretical study requirements.

Specialization in general medicine (i.e. family medicine) takes six years of training. This includes a specified period working in a hospital and a health centre, a specified number of theoretical courses and successful completion of a national examination organized by medical faculties.

In 1999 the number of physicians per capita was similar to or little less than that in the rest of western Europe, while the number of nurses was the highest in western Europe (Fig. 14).

Fig. 15 compares the trend of the number of physicians in Finland from 1990 to 1999 with Nordic countries such as Denmark, Norway and Sweden. In comparison to the above-mentioned countries and the EU average, the number of physicians per 1000 population in Finland was the lowest in the beginning of the 1990s, but close to EU average towards the end of the 1990s.

The training of nurses and other health care personnel such as physiotherapists, laboratory personnel and others takes place at polytechnics by municipalities under the guidance and financial support of the Ministry of Education. The Ministry of Education and the polytechnics negotiate and agree on the number of new students to be taken in for training.

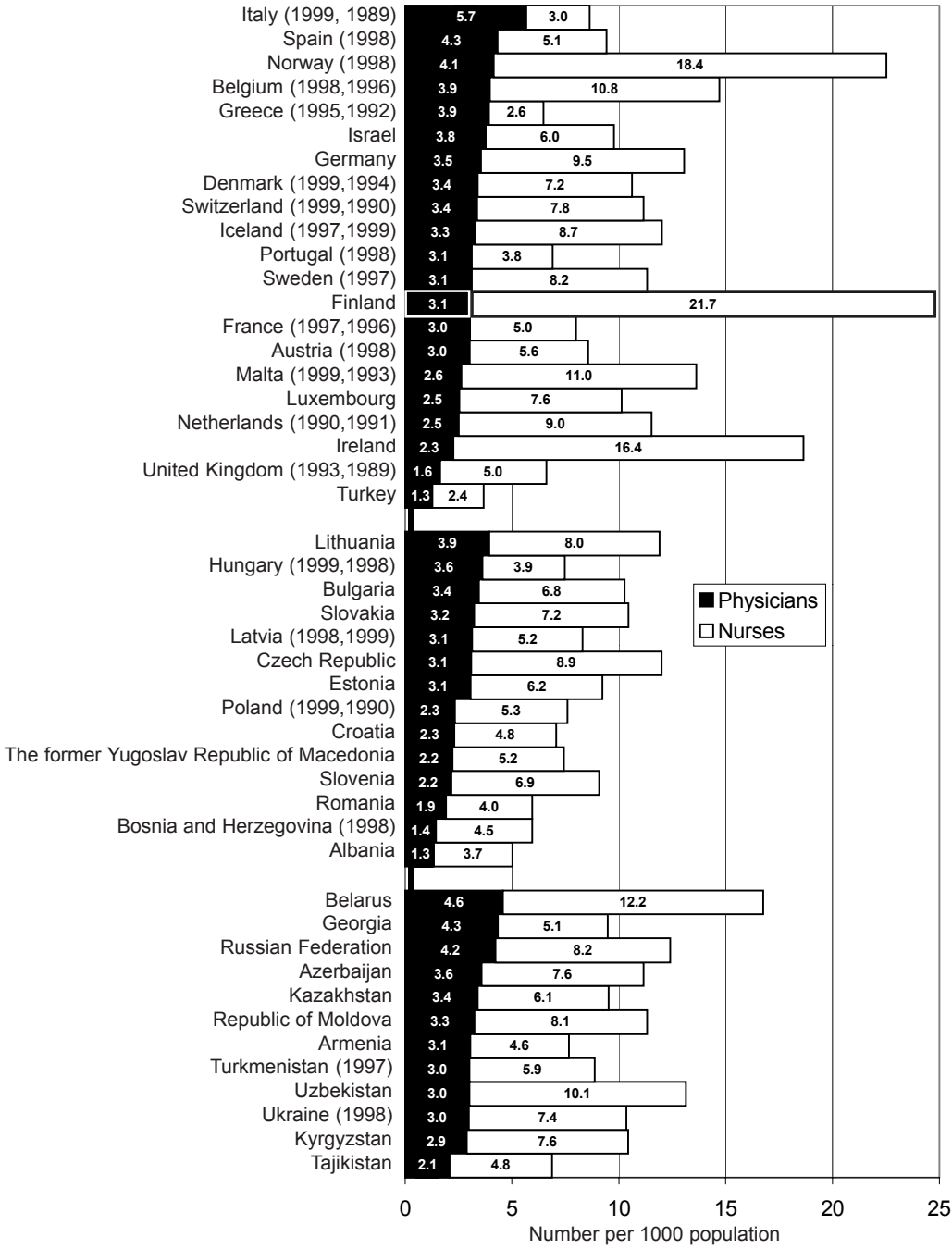
Up to the end of the 1980s, nurses followed a general education programme followed by specialization. Now the general and specialization programmes have been combined: students have common training in general nursing, complemented with training from a speciality of their choice: (i) nursing for surgery and internal medicine, (ii) paediatric nursing, (iii) anaesthetic and operating theatre nursing, (iv) psychiatric nursing. The training programme for public health nurses lasts three and a half years and that for midwives four and a half years. Assistant nurses used to be trained in a one-year programme, but this programme has been abolished. Instead, a new two and a half-year programme in basic care provision has been launched in both the health and the social services.

Fig. 16 shows that from 1980 up to today, Finland has always had the highest number of nurses among the Nordic countries. One reason for this may be that in the past the number of doctors was very low and therefore more nurses were needed for various tasks, particularly as care was rather inpatient-oriented. Second, a large number of public health nurses are needed for the various roles in public health care, especially maternal and child health care, school health care, occupational health care, home nursing, etc.

Table 9 shows the numbers of Finnish health care personnel from 1980 to 1999 for selected years. During this period, the number of physicians increased from 1.7 to over 3 per 1000 population. The number of general practitioners increased significantly during the 1980s, from 0.3 in 1976 to 1.3 per 1000 population in 1990 and levelling out at around at 1.6 during the 1990s. Dentists have been constant at around 0.9 per 1000 population, while nurses are continue to increase in numbers (21.7 per 1000 population in 1999).

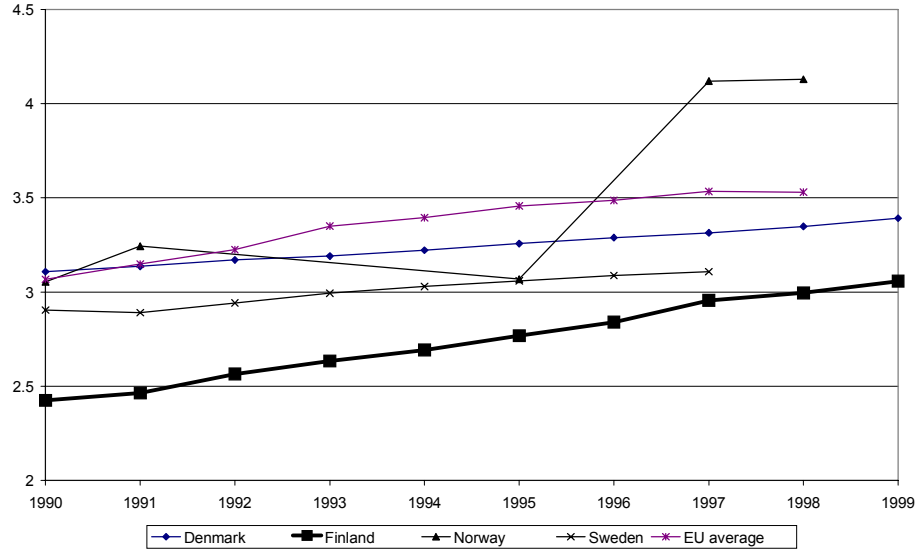
The National Board of Medico-legal Affairs is responsible for licensing, registration and, together with the State Provincial Offices, monitoring of health

Fig. 14. Number of physicians and nurses per 1000 population in countries in the WHO European Region, 1999 or latest available year (in parenthesis)



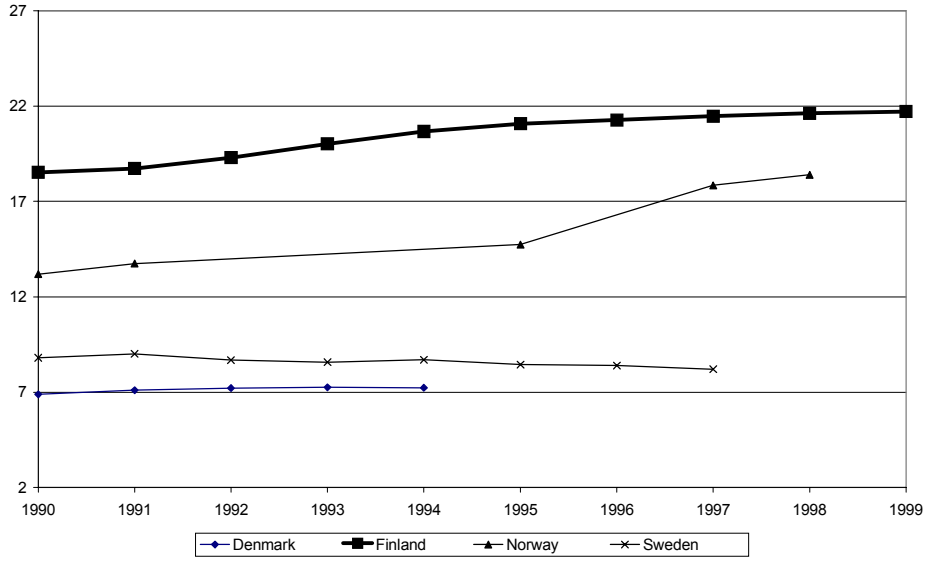
Source: WHO Regional Office for Europe health for all database.

Fig. 15. Numbers of physicians in Finland and selected countries, per 1000 population, 1990–1999



Source: WHO Regional Office for Europe health for all database.

Fig. 16. Numbers of nurses in Finland and selected countries, per 1000 population, 1990–1999



Source: WHO Regional Office for Europe health for all database.

Table 9. Health care personnel per 1000 population, 1980–1999, selected years

Health personnel	1980	1985	1990	1995	1996	1997	1998	1999
Physicians	1.7	2.1	2.4	2.8	2.8	3.0	3.0	3.1
General practitioners	0.3[a]	1.2	1.3	1.4	1.5	1.6	1.6	1.6
Dentists	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Pharmacists	14.1	13.8	13.8	14.1	14.1	14.3	14.5	14.7
Nurses	14.6	16.2	18.5	21.1	21.3	21.5	21.7	21.7

Source: WHO health for all database.
[a] 1976.

care personnel. It also undertakes disciplinary procedures concerning health care personnel.

The majority of people employed in health care work for municipalities. Up to the 1990s unemployment among medical doctors and nurses was practically nonexistent, but the economic crisis changed that situation. As the public sector gradually recovers from the crisis, however, the employment situation has changed. There is already a shortage of doctors, and a shortage of other health personnel is very likely in the future. The average age of people working in the municipal social welfare and health care services has risen radically, and a large number of personnel will retire in the next few years. In 1999 there were 62 000 employees over the age of 50 compared with only 36 000 at the beginning of the 1990s (both municipal social welfare and health care together). The number of employees under 30 was halved during the same period. It has been calculated that between 49 000 and 55 000 employees in the municipal social and health services will be retiring between 2001 and 2010. The aging of the population will further increase the need for personnel in social welfare and health care services.

Pharmaceuticals

Pharmaceutical products may enter the market by permission of the National Agency for Medicines, which is subordinate to the Ministry of Social Affairs and Health. New drugs can also enter the market by the integrated European market authorization system.

Pricing matters are dealt with at the Pharmaceuticals Pricing Board, which is attached to the Ministry of Social Affairs and Health. The Board regulates the prices of those drugs that are reimbursed by the NHI; there are no restrictions on pricing for other drugs having a marketing licence. For a pharmaceutical to be licensed as a reimbursable drug, its wholesale price– as determined by the Pharmaceuticals Pricing Board – must be reasonable. The "reasonable" whole-

sale price refers to the maximum price at which a drug may be sold to pharmacies and hospitals. The Pharmaceuticals Pricing Board also deals with applications for wholesale price increases for reimbursable drugs.

The retail price is determined by a combination of the wholesale price, the pharmacy's profit margin at the rate set by the Government and value-added tax.

The majority of drugs that have been granted sales permission in Finland also are licensed as reimbursable. Some mild analgesics that are sold in very small packages, and pharmaceuticals whose manufacturer has not asked for a reimbursement licence, are excluded. In these cases the manufacturer decides on the price of the pharmaceutical. This is done, for example, in the case of preparations used in hospitals (anaesthetics and radiological contrast mediums); the hospital and the producer negotiate a contract on the amount and price of such products.

Pharmaceuticals can be sold only by pharmacies. Prescription drugs are sold on the order of a medical doctor, a dentist or a veterinary surgeon. Pharmacies are privately owned but require a licence from the National Agency for Medicines. The number and location of pharmacies are therefore controlled.

The use of generic prescribing is modest, although it is now permissible to write the generic name of the pharmaceutical on the prescription instead of the brand name, which was obligatory before. Prescribing in electronic form is also permitted, so that drugs can be prescribed by fax or electronic mail if the sender and the recipient can be identified. However, the reimbursement procedure for electronic prescriptions is still under development.

As in many other European countries, pharmaceutical costs are rising continuously in Finland. From the beginning of the 1990s until 1998, pharmaceutical costs grew by about 10% every year. This growth was in contrast to the trend in other health expenditure categories, where expenditure decreased in the first half of the 1990s. The main reason for the growth is the use of new expensive drugs.

Since 1997, a number of measures have been launched to contain rising pharmaceutical costs:

- The purpose of the compulsory stockpiling system is to ensure pharmaceutical supply under exceptional circumstances. It is calculated to supply certain essential drugs for a specified minimum period. Previously, there was a stockpiling surcharge on the wholesale prices of such drugs to cover the additional costs arising from stockpiling. Since 1998, the additional expenditure arising from stockpiling has been covered by the National Emergency Supply Fund.

- The Pharmaceuticals Pricing Board has been obliged to check occasionally that wholesale prices remain reasonable.
- A holder of a sales permit applying for inclusion in the reimbursement scheme is required to carry out an economic evaluation and present it to the Pharmaceuticals Pricing Board as part of the application. Guidelines on the conduct of pharmaco-economic studies were issued by the Ministry of Social Affairs and Health in 1999.
- The therapeutic value and cost–effectiveness of new drugs must be demonstrated (data on effectiveness and experience of usage in daily life) before they can become eligible for 75% or 100% reimbursement. In practice this means that drugs are likely to be sold in the basic reimbursement category for two years, after which they can be considered for the higher reimbursement categories.
- In the case of new and expensive drugs, specialist doctors must issue patients who qualify with a separate patient-specific certificate to prove their eligibility for reimbursement. Examples of these kinds of drug are beta-interferon and medication for Alzheimer's disease, which are both very costly.
- The formula for determining pharmacy profit margins was simplified and made more regressive. This means that pharmacies do not make the same percentage profit on higher priced drugs as they do on lower priced drugs. Cheaper drugs have thus become more expensive and, vice versa, more expensive ones cheaper.
- The value-added tax on drugs was lowered from 12% to 8%.
- A national development programme was launched to change doctors' prescribing practices. The objective of the programme is to encourage more rational and evidence-based prescribing. It aims at making doctors more aware of the cost–effectiveness and safety of the medication they prescribe to their patients.

The above measures seemed to slow down the growth in pharmaceutical spending after their introduction. In 1998, the growth in retail spending was less than 1%, and reimbursement spending grew by 2.1% compared to 9–10% in the previous years. In 1999, however, drug expenditure and reimbursement costs started growing faster again (the former grew by 8.9% and the latter by 8.2%). Although some of the above-mentioned measures may still have an impact in the long run, it seems that the problem of growing pharmaceutical costs has not been solved and that further measures are needed.

Health care technology assessment

In 1995, an independent centre for health care technology assessment, known as FinOHTA, was established within the National Research and Development Centre for Welfare and Health ("Stakes"). The centre's main objective is to promote evidence-based methods and to improve the effectiveness and cost–effectiveness of care. It supports and coordinates health care technology assessment and distributes both national and international assessment results within the health care system. The centre receives data from health care technology assessment agencies in other countries, but it also supports assessment research in Finland. In addition to already established diagnostic and treatment methods, the centre evaluates new methods, particularly those that are important from the point of view of public health or the national economy.

At present, the centre employs around ten people and makes extensive use of a wide network of experts in the field of medicine and health care. During its existence, the centre has participated in or supported about 30 assessment projects, while another 30 such projects are in progress. Furthermore, the centre disseminates assessment results both from Finland and other countries through different series of publications. It is difficult to show the significance of FinOHTA in figures, but the centre has made health technology assessment known among health professionals and has contributed to the acceptance of evidence-based and financial considerations in health care.

Financial resource allocation

Third-party budget setting and resource allocation

The government presents its annual budget proposal to the parliament, which makes the final decision on how much will be allocated to the health care sector as state subsidies. The Health Committee of each municipality prepares the municipality's budget for health care. The Municipal Council approves the total municipal budget and, within this budget, the resources allocated for health. The Council of each hospital district determines the budget for hospital care (within its district area).

Until 1993 state subsidies were allocated retrospectively according to actual costs, adjusted according to the wealth of the municipality: the richer a municipality the smaller the subsidy, and vice versa. If municipalities provided services that did not follow the national five-year plan for social and health care, they did not get a state subsidy for these services. The state subsidy was earmarked and could only be spent on health care. This system helped achieve equal access and good quality services everywhere in the country but, as the state paid part of the actual health care costs retrospectively, there were no incentives for efficiency.

In 1993, the state subsidy system was reformed. As mentioned earlier, the reform was intended to achieve, *inter alia*, cost-containment and to improve efficiency within municipal health services. Under the new system, all state subsidies are calculated according to demographic and other need criteria. The subsidy is automatically paid in advance to the municipality and it is not earmarked. The criteria for determining the amount of state subsidies on health care have been changed over the years. The present criteria are number of inhabitants, age structure and morbidity. There are additional criteria for remote areas and archipelago municipalities.

Municipal capital investments are financed in different ways depending on their size. The state subsidizes medium-sized (Fmk 2–25 million; € 336 000 to € 4 204 000) and major (over Fmk 25 million, over € 4 204 000) capital investments. The state subsidy varies from 25% to 50% of the capital investment's costs. Municipalities submit their plans for capital investments to the Provincial State Offices. Medium-sized investments are approved by the Provincial State Offices, but major capital investments require approval by the Government. The Ministry of Social Affairs and Health allocates state funding for medium-sized capital investments to the Provincial State Offices.

The system of state subsidies for capital investments is planned to be changed over the next few years. The system for capital investments was suitable to the time when hospital buildings and other facilities were needed and had to be built. But as there is already excess capacity in terms of facilities, it is perceived that the system needs a change. On the other hand, a number of the existing hospital and other facilities were built in the 1950s and 1960s. There is need to renovate them physically and functionally, as they do not always meet the standards and ideology of today's medical care. Therefore, it has been argued that the state subsidy system for capital investments should be directed to renewing these old facilities. The present plans are, however, that state subsidies for capital investments will be gradually reduced. Legislation concerning the change has already been approved by the Parliament. The state subsidy will be reduced to 25% of the capital investment's costs from the year 2002 onwards. However, during a transition period from 2002–2003 medium-sized investments will still be subsidized 25–50% of the investment costs as so far. It is also planned that, in the long-term, the system will be directed more towards developing and renewing activities and towards making activities more efficient, for example, to activities that would support professional skills.

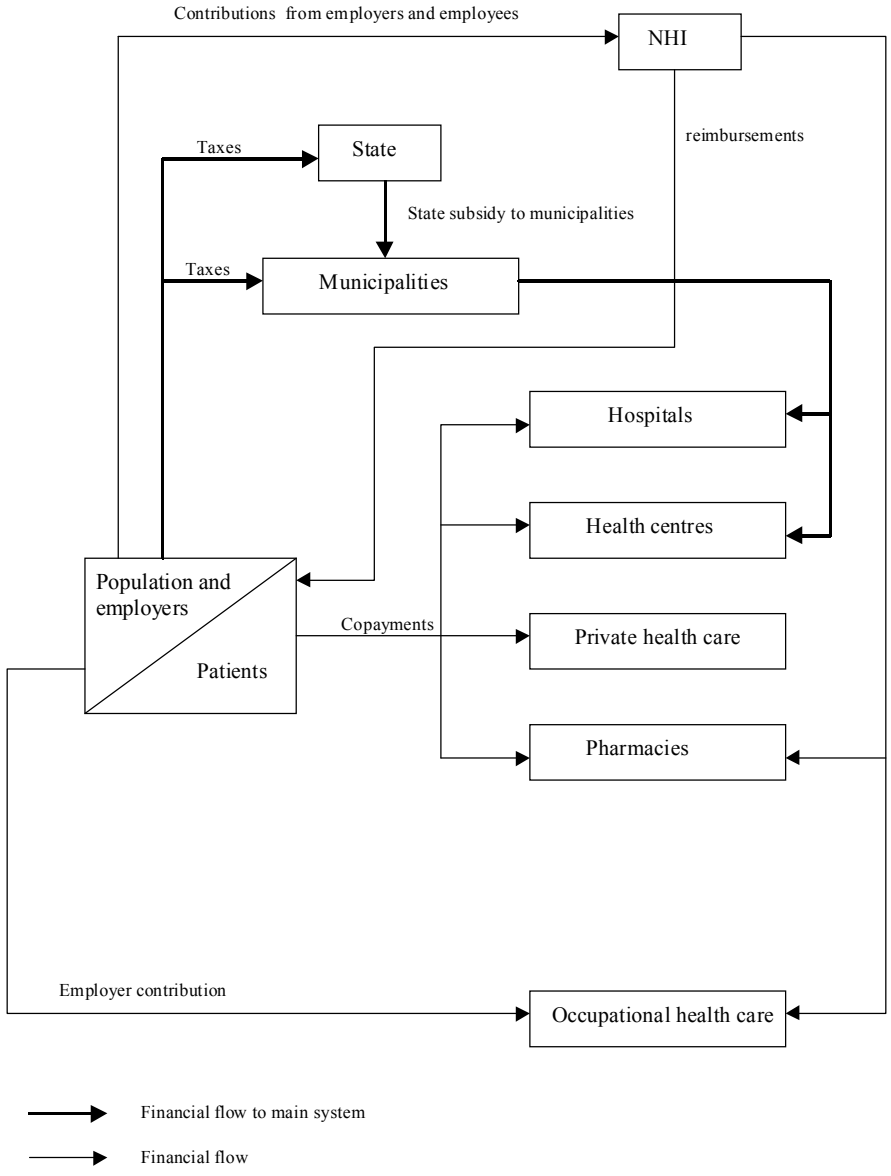
Capital investments in the municipal health care can be financed without the state's financial contribution also, for example by municipalities, contributions from private sources and patient associations. Municipalities are allowed to borrow money to finance capital investments (or for other purposes).

The Finnish Slot Machine Association also finances capital investments in health care. The Association supports only voluntary organizations, i.e. it does not give money towards municipal capital investments. Its share of capital investments in health care is not insignificant. This has resulted in greater need to coordinate investment activities. However, the Association's share of health care investments is difficult to calculate precisely because investments funded by it can also be considered social care or are indirectly related to health care, such as special housing for the elderly or the mentally ill.

Also, the European Investment Bank has started financing some investments in health care in Finland, but its role in this respect is still evolving.

Fig. 17 graphically represents all financing flow mechanisms.

Fig. 17. Financing flow chart



Payment of hospitals

The financing of hospitals changed at the same time as the state subsidy system changed in 1993. Before 1993, hospitals received about half of their revenue from the state via the Provincial State Offices. The other half came from the municipalities, but as the actual costs were reimbursed through state subsidies the risk of high costs was largely borne by the state and the municipalities. This former system did not encourage hospital productivity: hospital revenues were fairly automatic from year to year and without active control costs. When the state subsidy system changed, the risks and incentives facing municipalities also changed. With prospectively fixed state subsidies, the risk of overspending is borne by the municipalities – as are the advantages of making savings.

Since 1993 hospitals have received their revenue from the municipalities according to the services used by their inhabitants. Hospitals are paid in several ways, and determine prices for their services without national guidelines. Much effort has been made within hospitals to define services and to calculate a price for each service. Services are defined and prices calculated in very different ways: there is not even uniformity within a single hospital district. Service package prices for inpatient care are used in some districts. A service package includes certain services (the diagnosis and/or treatment of an illness, for example, childbirth or cholecystectomy) for a specified length of stay. The prices for outpatient care also vary. Normally, the price is set per visit and often according to the range and level of treatment.

There are variations in how hospitals invoice municipalities. Legislation defines the maximum payments that can be charged from patients, but it does not regulate payments of hospitals. Municipalities negotiate annually on the provision and prices of services with their hospital district. They in fact come to an agreement rather than a formal contract with the hospital district. The agreements may be revised during the year according to the actual amount and type of services provided by hospitals. Municipalities pay bills directly to the hospital's account.

Invoicing and pricing by hospitals are in a continuous process of change. At present, it is extremely difficult to compare services and prices between different hospitals and hospital districts because, as has been said, they are defined in different ways and the prices can be changed during the course of the year.

There is little evidence that hospitals purposely prolong lengths of stay because of the invoicing system. Hospitals want to appear efficient and are motivated to discharge patients as quickly as possible in order to increase productivity. On the other hand, they are not reluctant to admit patients for a new episode of treatment.

Hospitals and hospital districts have become increasingly interested in using diagnostic related groups (DRGs) as the basis for billing municipalities. As far it is known, three hospital districts used DRGs in 2000, and an additional two or three districts introduced them in 2001. An even greater number of hospital districts are using DRGs as a tool for planning.

Probably the biggest problem associated with covering the costs of hospital care in Finland is that municipalities who finance hospitals have insufficient epidemiological, economic and other skills owing to their small population base. Setting service priorities and prices is producer-centred. A hospital district usually negotiates a prospective budget for specialized care for the following year with each municipality within its area. Some experiments are under way in which municipalities and hospitals make a contract in advance on the basis of predicted levels and prices of services.

Health care units in Finland can receive a special state subsidy to compensate for additional costs arising from medical teaching and research. In 2001, the total subsidy amounted to Fmk 780 million (€ 131 million). About 55% of the total amount was paid towards the basic and specialist training of doctors, and about 45% for research in medicine and other health sciences. The state subsidy on research is divided between university hospital areas according to the number of scientific publications produced by their researchers. About 90% of the subsidy on research goes to university hospitals.

Payment of physicians

Hospital physicians are salaried employees, the basic monthly salary depending on the physician's post and length of career. Various bonuses can be paid, such as for increased responsibility, but in practice this is little used. There is additional remuneration for being on call (it can also be taken as leave). Physicians receive extra payments for certificates of health status.

The payment of doctors in municipal health centres varies. Most are salaried employees with the same conditions as hospital physicians concerning extra remuneration. In those health centres where the personal doctor system has been introduced, doctors are paid a combination of a basic salary (approximately 60%), capitation payment (20%), fee-for-service payment (15%) and local allowances (5%). The personal doctor payment is thought to give better incentives for cost–efficiency than the monthly salary payment. In the private sector, physicians are paid fee-for-service, patients being partly reimbursed by the NHI.

The physicians' union negotiates with the Commission for Local Authority Employers over physicians' salaries. The government plays no role in this procedure. The average income of medical doctors is above the general average in Finland (for a full-time salary-earner, Fmk 12 000 or € 2018 per month in 2000). The basic salary of primary care doctors was on average Fmk 15 000 (€ 2386) per month and the total salary, including payments for being on duty and other extras was Fmk 24 000 (€ 4036) per month in 2000. The basic salary of a hospital physician was on average Fmk 17 000 (€ 2859) per month and the total salary Fmk 28 000 (€ 4709) per month, including payments for being on duty and other extras. Doctors' earnings depend largely on how much they work out-of-hours, and how many extras and bonuses they receive for experience, level of training, responsibility, etc. Specialists who work in private practice in addition to their work in public hospitals, and personal doctors who see a lot of patients and do a lot of on-call work, usually have a higher income than other doctors.

Strikes by doctors and other health care personnel are not very common. The latest, in spring 2001 over pay and conditions of work, took five months to resolve. Prior to that there had been only one other strike episode, during the 1980s.

Health care reforms

Aims and objectives

The long-term objectives of Finnish health policy have always been to achieve the best possible health of the population and to reduce disparities in the health of the different social groups. Up to the 1970s, policy issues that concerned the health care delivery system were mainly about building the service system and improving accessibility to services. The introduction of the Primary Health Care Act at the beginning of the 1970s formed the basis for the further development of the health care system and health policy in Finland.

Attention has long been paid to many public health issues, but in the 1980s public health policy became more focused. This was particularly the result of WHO's health for all policy.

In the 1990s, developments in health care were influenced by "external" circumstances: severe economic recession, the 1993 state subsidy reform, Finland's membership of the EU, and socioeconomic turbulence in some neighbouring countries. A broadly based policy of preventive health care is still being pursued, whereby it is urged that health should be taken into consideration in all aspects of public decision-making. Nevertheless, the importance of efficient and accessible health services available to the entire population also continues to be emphasized.

Finland's health policy has progressed towards the chosen objectives. The health of the population as a whole has improved considerably, although differences between social groups still remain.

While there has been no major reform of the health care system in Finland, there have been a number of changes to deal with specific problems. A personal

doctor system was introduced in the 1980s when waiting times increased to unacceptable levels and there were problems with continuity of care. Because the number of patients treated as inpatients (per capita) has been much higher than in many other countries, an important aim of Finnish health policy has been to reduce hospital and other kinds of institutionalized care and to extend outpatient and home care services. The growing number of elderly people, together with financial pressures, has also influenced this emphasis on outpatient care. In 1993, the state subsidy system to municipalities was reformed with the aim of improving efficiency and containing costs. A number of measures were initiated in the middle of the 1990s in order to contain the rapidly rising pharmaceutical expenditure.

Health for all policy

Health and health promotion have been taken into consideration in sectors other than health care, particularly from the 1970s onwards. With the publication of Finland's own national health for all programme in 1986, a more streamlined and clear health policy emerged. The main guidelines of the programme were the promotion of healthy lifestyles, the reduction of preventable health problems and appropriate development of the health care delivery system. The programme has been the basis for Finnish health and health care policy ever since.

The WHO Regional Office for Europe made an evaluation of the Finnish health for all programme and published a report in 1991. The evaluation showed the strong sides of the Finnish health care system but also the areas where Finland had not succeeded. It was noted that health for all had been restricted to health professionals and health experts, even though the programme should have been extended to other sectors as well. There was also insufficient local input, weak management practices and poor public and private sector coordination.

The programme was reviewed according to WHO recommendations and the revised health for all programme was approved by the government in December 1992 as the basis for the development of Finnish health policy. The main targets were, among others, to reduce differences in health between population groups, to improve the functional capacity of the population, to encourage intersectoral cooperation in preventive health policy, to improve the cost–effectiveness of the health services, and to further amend the competencies of health care staff. In the strategy for social policy issued by the Ministry of Social Affairs and Health in 1995, these targets were not changed.

A new public health policy programme entitled "Health 2015" was published in May 2001, setting guidelines for public health policy for the next 15 years.

The emphasis is on the promotion of health rather than the development of the health care delivery system. The programme contains 8 targets and 36 statements for action. The main idea is that health will be taken as one of the factors that steers and influences public decision-making. The programme is based on the WHO health for all policy, but the targets are clearly national ones.

Health care reforms and their implementation

National measures and development projects

After the introduction of the renewed state subsidy system in 1993, the system has undergone some changes. Between 1993 and 1997, state subsidies for health care depended on the age structure of the population, morbidity, population density and land area. The system of calculating the subsidies as well as the criteria were changed in 1997, the present criteria being number of inhabitants, age structure and morbidity. There are also add-ons for remote-area and archipelago municipalities. A new review of cost-sharing between the state and the municipalities has been carried out, but no decisions have yet been made on any future changes.

The national four-year plan for social welfare and health was abolished in 1999. Instead, every time a new government is appointed it draws up a social welfare and health care programme for four years. The programme is called the Social Welfare and Health Care Target and Operating Plan. The aim is that the Government, the municipalities and other actors in the field of social welfare and health work towards the achievement of common targets. The Government reports to Parliament every two years on progress made with the plan. A decision on resources for the actions defined in the plan is made annually as part of the national budget.

The first Target and Operating Plan (for 2000–2003) was issued in October 1999. It emphasizes the importance of prevention. The main principle is to increase cooperation between different sectors and between municipalities. Further, the plan emphasizes the importance of ensuring sufficient staff with the appropriate skills within the social welfare and health care services. Particular attention is paid to the health and social welfare of children, the elderly and the mentally ill.

A Health Care Development Project has been going on since 1997, the purpose of which is to explore the shortcomings in the functioning of the health service and in the client's status and to make proposals for solving the problems

detected. The project is based on the work of five regional cooperative groups. The groups have drawn up their own plans for the development of health care within their region and have decided on its implementation. The main issues in the project are the availability, functioning, appropriateness and quality of services, the client's status, the use of personnel skills and further education of personnel, and cost containment. Many of the issues are the same as those included in the Social Welfare and Health Care Target and Operating Plan. The project will continue until 2001.

Changes in the health care investment system are planned to take place. From 2002, the state subsidy paid for capital investments will be reduced to 25% of the cost of capital investment. However, during a transition period from 2002–2003, medium-sized investments (Fmk 2–25 million) will still be subsidized 25–50 % of the investment costs, as has been done so far. It is planned that the state subsidy system for capital investments will gradually be directed more towards developing activities and improving professional skills. Investments alone will be supported in exceptional cases.

The rising costs of pharmaceuticals have raised major concerns. Several measures were launched in 1997 and after to contain the rising costs (discussed in the section, *Pharmaceuticals*). A task force set up by the Ministry of Social Affairs and Health is considering changes in the reimbursement system for pharmaceuticals, and is expected to make its proposals during 2001.

Growing attention has been paid to mental health services. Owing partly to the economic recession of the 1990s and partly to the active reduction of institutionalized psychiatric care, there have been signs of insufficiencies in the quantity and quality of psychiatric services. The government recently decided to earmark a subsidy for mental health services for children and adolescents in order to correct these insufficiencies. Furthermore, an action programme called *Mielekäs elämä!* ("Meaningful life!") has been launched to place more importance on mental health, to enhance intersectoral cooperation and to improve the delivery of mental health services. The programme is carried out by local actors as well as various national actors in the field of social welfare and health care. A proposal for national quality standards for mental health care similar to the quality standards for elderly care was published in summer 2001. The national standards for mental health will be refined and adjusted further during 2001.

Legislative changes have been made on the provision of dental health care. Publicly subsidized dental care will gradually be extended to the entire population, both through the municipal service system and through the NHI. By 2002, the whole population will be offered publicly funded dental care.

Globalization and cross-border movement raise concerns about the increase in communicable diseases, particularly drug-resistant tuberculosis, as well as the further increase in the use of drugs. Other possible future challenges are cross-border utilization of services, as well as the appearance of profit-making health care providers from abroad. The latter, however, is likely to stay limited because of the small population size of Finland. Also, decisions taken by the EU are likely to affect the future of public health and health care in Finland.

Local development projects

A marked feature of recent development in the Finnish health care system is the emergence of a number of local projects and experiments around the country.

In the capital area of Helsinki, a new hospital district (HUS) was formed in 2000 in order to improve efficiency and eliminate overlapping of services. The new district was formed by merging two former districts in the capital area (Helsinki and Uusimaa) as well as the Helsinki University Hospital. The impact of this measure remains to be seen.

Models with similarities to the purchaser–provider model are being developed in some parts of the country. Pirkanmaa Region around the City of Tampere has developed its own model, whereby the Pirkanmaa hospital district and its member municipalities make agreements on the provision of specialized care. The largest municipalities act on their own behalf, whereas the smaller municipalities have formed cooperation districts to arrange specialized services for them. If services are used in excess of or less than agreed there are special provisions for the billing of these services.

New openings have also been made in primary health care. For example, one municipality has decided to purchase its health services from Samfundet Folkhälsan, which is a non-profit "third sector" organization. The effects of this decision have not been without problems but it cannot be fully assessed yet. Another municipality purchases its health services from its neighbouring municipality. A further municipality arranges its primary health services through an agreement with its hospital district. Moreover, some former district hospitals have been merged into the nearby health centre and their service profile has been developed accordingly.

The health centre and district hospital in the municipality of Mänttä will be merged into a single organization that provides all health services for the inhabitants of Mänttä and the nearby municipality of Vilppula. This means that both primary and secondary care will be arranged by one and the same organization. The new organization will be made a unit of the Pirkanmaa hospital

district. The changes are planned to take place in 2002. The aim of the new model is to secure health services for the local population at reasonable cost. Other similar models, whereby primary and secondary care are combined into a single organization, have also been under discussion.

A regional information technology (IT) project in western Finland aims at improving seamless care by developing IT systems between various providers of care. New IT and telematic solutions are being tested and assessed. In addition, an electronic social services and health care client card is being examined. Initiatives to assess and develop the use of IT have also been launched in other parts of the country.

Conclusions

Any discussion of the health care system in Finland starts with the observation that it has been in many ways successful. There is a comprehensive primary and specialized care system covering the entire population. Health services are locally accountable through the municipalities, and the health care system has been changed and developed gradually over a long period of time.

From the point of view of equity in provision, the health care system in Finland provides care to the entire population. The financing of care still contains a number of unusual features that undermine an otherwise equitable system. The NHI system subsidizes both private health care and occupational health care, though neither of these is available everywhere in the country. A second equity problem arises from the rising proportion of health funding from out-of-pocket payments. That these have risen is more likely to be a function of economic constraints imposed by the past recession than a consequence of recent changes in the health care system.

Services and their content are defined by different providers in different ways; costs and services are not readily comparable. Lengths of stay for inpatient care have declined but it is not clear that there are incentives on hospitals to improve efficiency. There are also marked variations in per capita expenditure and activity rates between different municipalities.

Possibilities for patients to choose the service provider have been increasingly discussed. Patients do not have much choice, either of primary care doctor or of hospital. In practice, however, Finland's geography and the relatively high rural population impose some constraints on patients' freedom of choice. The advent of the personal doctor system may help improve continuity of care.

Despite the fact that the municipal system serves the country well, there are problems when responsibility is devolved to such small units. With their small population, the know-how and experience in municipalities is not comparable to those of large professional secondary care providers. This creates an imbalance both in professional as well as in economic questions.

The Finnish health care system has survived the severe economic crisis of the first half of the 1990s fairly well. Despite the cuts in health budgets in those days, the quality and quantity have been largely maintained. This was primarily achieved through better management and improved allocation of resources. The situation of mental health services remains a concern, but with the various measures launched improvements should be expected in the near future.

Finland faces a number of challenges in the field of health and health care. Although the rates of heart disease and diseases of the circulation have considerably been reduced, the incidence of other health problems such as musculoskeletal diseases, mental health problems and allergies is growing.

A recent feature of the health care delivery system seems to be its development in diverging directions. It remains to be seen how it will cope with developments at various levels and in various parts of the country.

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Appendix

Useful Internet links to health care institutions in Finland

Ministry of Social Affairs and Health
http://www.stm.vn.fi/

Government
http://www.valtioneuvosto.fi/

Parliament
http://www.eduskunta.fi/

Provincial State Offices
http://www.intermin.fi/eng/prov/

Social Insurance Institution
http://www.kela.fi/

National Research and Development Centre for Welfare and Health ("Stakes")
http://www.stakes.fi/

National Authority for Medico-legal Affairs
http://www.teo.fi/

National Agency for Medicines
http://www.nam.fi/

National Public Health Institute
http://www.ktl.fi/

Radiation and Nuclear Safety Authority
http://www.sttk.fi/

National Product Control Agency for Welfare and Health
http://www.stuk.fi/

Finnish Institute of Occupational Health
http://www.occuphealth.fi/

Association of Finnish Local and Regional Authorities
http://www.kuntaliitto.fi/