European Observatory on Health Care Systems

Health Care Systems in Transition

Austria

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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2001

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RESEARCH AND KNOWLEDGE FOR HEALTH
By the year 2005, all Member States should have health research, information and communication systems that better support the acquisition, effective utilization, and dissemination of knowledge to support health for all.

Keywords

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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 Cooperation 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.

Acknowledgements

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anced Studies). All information and data on the Austrian health care system refers to the position at the start of 2000. The Austrian profile was edited by Anna Dixon (European Observatory on Health Care Systems). The Research Director for the profile was Elias Mossialos.

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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 Anna Maresso, Caroline White, Wendy Wisbaum and Shirley and Johannes Frederiksen.

Special thanks are extended to the Regional Office for Europe health for all database from which data on health services were extracted; to the 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 which have provided national data.

Underlined text indicates that terms are included in the glossary at the end of the report.

Introduction and historical background

Introductory overview

Austria is a federal republic in central Europe and consists of nine states (Länder): Vienna (which is both a state and the country's capital), Lower Austria, Burgenland, Styria, Salzburg, Upper Austria, Carinthia, Tyrol and Vorarlberg. Austria has been a member state of the European Union since 1995 and is now one of the eleven countries of the eurozone.

Population and health status

Table 1 shows some basic (aggregate) health and population indicators. In 1998 the Austrian population reached 8.08 million, 56% of which lived in urban areas (1995 data). With a population growth of 4.4% since 1990, Austria – together with the Netherlands – is among the EU countries with the highest growth rate, ranking just after Luxembourg. The total fertility rate per woman in Austria is 1.37 which is almost equal to the EU average (*1*). The dependency ratio[1] was 47.9 in 1990 and is expected to rise to 62.1 by 2030, making it slightly above the projected OECD average.

Table 1. Health and population indicators, 1998

Population (in million)	8.80
% over 65 years (female/male)	15.44 (62.2/37.8)[a]
Life expectancy at birth (female/male)	77.48 (81/74)[a]
Infant mortality per 1000 live births	4.92
Total fertility rate per woman	1.37
Death rate per 1000 population	9.70
Birth rate per 1000 population	10.06

Source: WHO Regional Office for Europe health for all database, CIA – The World Factbook 2000.

[a] 1999 estimate.

[1] The dependency ratio is defined (according to the UN) as those under 15 years of age and those over 65 years of age in relation to the population aged 15 to 65 years.

Fig. 1. Map of Austria[2]

Source: CIA - The World Fact Factbook 2000.

Table 2 lists the ten major causes of death in Austria, ranked by rate of mortality in 1997. Cardiac diseases, cancer and cerebrovascular diseases have been the leading causes of death for three decades. Mortality declined by more than 40% as compared to 1970. The drop in deaths from diabetes, chronic liver disease and cancer was comparatively small in the period under observation (approx. 20%). Deaths from urogenital and respiratory diseases dropped most, i.e. by about three quarters between 1970 and 1997.

In relation to the EU's average mortality rate, Austria registered a stronger (faster) decline in mortality (18%) between 1970 and 1995, with the reduction in cancer-induced mortality being the greatest. Whereas the number of deaths from cancer dropped by 17%, or from 228 to 189 per 100 000 population within 25 years, the decline in the EU average was much lower than this. Between 1970 and 1997, the respective rates dropped by 20% in Austria. This could be due to the marked decrease in cancer mortality among women (*2,3*). However, the drop in deaths from heart diseases, bronchitis-related diseases, emphysema,

[2] 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 2. Leading causes of death (ICD-10), age-standardized[a] per 100 000 population

	1970	1975	1980	1985	1990	1995	1997	% change 1970–1997
All causes	1 206.18	1 114.01	1 015.70	932.30	810.47	745.18	709.67	-41.16
Heart diseases	559.17	538.40	515.19	471.51	389.5	369.30	355.65	-36.40
Malignant tumours	228.32	216.67	213.10	202.70	199.92	188.86	182.34	-20.14
Cerebrovascular diseases	176.24	161.06	150.27	138.12	98.85	81.43	80.54	-54.30
Accidents and harmful consequences	103.47	96.57	85.69	76.99	63.58	54.27	48.41	-53.21
Pneumonia, flu, other diseases of the respiratory tract	98.96	77.09	50.41	48.94	38.58	29.91	29.72	-69.97
Chronic liver diseases and cirrhosis	27.71	30.27	29.24	28.68	25.95	24.35	22.24	-19.74
Suicide and self-inflicted injury	24.78	24.14	25.09	26.22	21.70	20.20	17.80	-28.17
Diabetes mellitus	16.68	13.16	12.07	13.71	18.73	15.45	13.59	-18.53
Bronchitis, emphysema and asthma	28.75	20.6	17.67	27.09	18.54	11.74	9.21	-67.97
Nephritis and nephrosis	26.12	22.17	15.95	11.75	8.94	6.68	6.40	-75.50

Source: WHO Regional Office for Europe health for all database, IHS HealthEcon 2000.

[a] The age-standardized mortality reflects the crude death rate in Austria and is adjusted for the age structure of the EU population.

asthma, chronic liver diseases and cirrhosis was in some instances far below the EU average, as was the reduction in diabetes-induced mortality rates, which was only one third of the respective EU-wide decrease.

Politics

Austria is a democratic republic and a federal state composed of nine independent states (Länder): Burgenland, Carinthia, Lower Austria, Upper Austria, Salzburg, Styria, Tyrol, Vorarlberg and Vienna. Each state is subdivided into political districts, which in turn are subdivided into local communities. The federal capital and the seat of the federal government's supreme bodies is Vienna. At Länder level, federal laws are implemented by the state governor (through indirect federal administration) unless there are special federal agencies entrusted with this task (direct federal administration). In indirect federal administration matters the state governor is bound by the instructions issued by the central government and its individual ministers.

Federal legislative power is in the hands of the lower house of the parliament (National Council) and the upper house of the parliament (Federal Council). The National Council, includes 183 members and is elected for a four-year term. The Federal Council, is the Länder's chamber of federal legislation. Its members are elected by the individual parliaments of the Länder for the duration of the respective state parliament's legislative period, and the number of

members delegated by each state is based on the ratio of its inhabitants to the number of inhabitants of the most populated state. Each state, however, is entitled to be represented by at least three members in the Federal Council. Hence, the Federal Council does not have a fixed number of members that remains the same over time. Like the members of the National Council, the members of the Federal Council have a free mandate. The legislative power of the Länder is exercised by the state parliaments.

The economic and social partnership is a body where employers' and employees' representatives cooperate regarding the preparation and implementation of economic and social policies. The most important instrument of the economic and social partnership is the Parity Commission for wage and price issues, which has been created voluntarily and is not based on any statutory regulations. The Parity Commission is chaired by the Federal Chancellor and its members are: the Austrian Trade Union Federation, the Federal Chamber of Labour, the Austrian Economic Chamber, the conference of the presidents of the chambers of agriculture, and representatives from the relevant federal ministries. Austria's social partners generally play a leading role in the design of social policy. Membership of the respective chambers, represented on the commission, is mandatory. The chambers are financed through membership fees and members elect their own executives. All the (statutory) interest groups involved usually try to reach a consensus on controversial policy issues. With regard to government social policy, the social partners are involved in all decision making. Their representatives take part in political negotiations and hold important positions within the public sector and the social insurance institutions. The social partners give expert opinions on all bills to be introduced in parliament. The high level of influence previously exercised by the social partners on Austria's social policy design has been substantially reduced following changes to the Austrian political landscape in the wake of the general elections of October 1999.

Economy

Austria's economy is growing, as is that of the entire European Union. According to current medium-term forecasts, real economic growth will move from 2.1% in 1999 to 3.4% in 2000 and continue at a stable pace of 3.1% in 2001 (see Table 3). In 1999 total employment passed the three-million mark. It is expected that this trend will continue. The unemployment rate was expected to decline slightly in 2000 and continue to decline thereafter. The rate of growth in labour productivity was expected to reach a level of roughly 2% in 2000, following a short-term slump to +0.8% (1999). As the most important source of funding for the health care system, wages were expected to rise by 3.5% in

2000 and more (by up to 4% annually) in the years that follow. However, when related to individual workers, wage increases are much smaller, as the projections are based on assumptions of continuing employment growth. Rising wages will also coincide with rising social security contributions, as the latter are linked to income. The persistently high oil price and the increase in public charges that took effect in mid-2000 will, in conjunction with the favourable business situation, put pressure on price levels. Consequently, it is very likely that the predicted moderate development in consumer prices for 2000 was too optimistic.

Table 3. Economic indicators

	1995	1996	1997	1998	1999[2]	2000[2]	2001[2]
GDP at 1995 prices[1]	2 375	2 422	2 451	2 522	2574	2662	2743
		2.0%	1.2%	2.9%	2.1%	3.4%	3.1%
GDP in nominal terms[1]	2 375	2 453	2 522	2 611	2 689	2 808	2 933
		3.3%	2.8%	3.5%	3.0%	4.5%	4.4%
Consumer price index	350	357	361	365	367	373	380
(basis 1966)		1.9%	1.3%	0.9%	0.6%	1.8%	1.7%
Wages and salaries	1 279	1 291	1 311	1 366	1 420	1470	1 528
(national accounting)		1.0%	1.5%	4.2%	4.0%	3.5%	4.0%
Wages and salaries	43 017	43 675	44 147	45 550	46 769	47 798	49 184
per active worker		1.5%	1.1%	3.2%	2.7%	2.2%	2.9%
Dependent active	2 972	2 956	2 969	2 998	3 036	3 075	3 107
workers in 1000[3]		-0.6%	0.4%	1.0%	1.2%	1.3%	1.0%
Unemployment rate in %,	6.6	7.0	7.1	7.2	6.7	6.0	5.8
national Definition							
absolute differentials		0.4	0.1	0.1	-0.5	-0.7	-0.2
Labour productivity	79 911	81 950	82 567	84 098	84 790	86 560	88 296
per active worker		2.6%	0.8%	1.9%	0.8%	2.1%	2.0%
GDP at 1995 prices	2 375	2 422	2 451	2 521	2 574	2 662	2 743

Source: Mittelfristige Prognose der Österreichischen Wirtschaft 2000–2004, Institute for Advanced Studies, July 2000.

[1] in billion ATS

[2] forecast

[3] parental leave benefit claimants and people in military (civil alternative) service with continuing employment contracts not included.

Economic growth, as projected for Austria in 2000 and 2001, is absolutely consistent with that of the European Union as a whole and slightly below that of the eurozone (see Table 4).

To ensure participation in European Economic and Monetary Union, Austria's fiscal deficit (net financial requirement) was reduced to slightly below 2% of GDP by means of consolidation measures adopted in 1996 and 1997 which mainly affected the public health and welfare system (*4*). National health

Table 4. Annual percentage change in real GDP

	1999	2000	2001
Austria	2.1	3.4	3.1
EU-15	2.3	3.4	3.1
EU-11[a]	2.3	3.5	3.3

Source: EU-15 and EU-11: OECD Economic Outlook, preliminary edition June 2000, Austria: Mittelfristige Prognose der Österreichischen Wirtschaft 2000–2004, Institute for Advanced Studies, July 2000.
[a] The EU-11 are the EMU countries and include all EU member states except for the United Kingdom, Denmark and Greece.

care policies included the introduction or increase of patient deductibles to ensure higher social insurance revenue and the reorganization of hospital finance. The implementation of health care reforms will be discussed in greater detail in the section on *Health care reforms*.

Historical background

The development of Austria's health care system is closely linked with the establishment of a welfare state within the territory of the Austro-Hungarian monarchy. Regulatory provisions had already been published in the servants' ordinance of 1810 and in the Lower Austrian governmental ordinance of 1814, which was later extended to the other states of the monarchy. Under these regulations, employers were obliged to pay for hospital stays and the care of sick employees. However, at first, these ordinances existed only on paper. The 1859 Industrial Code regulated the creation of benevolent funds and cooperative health insurance funds – but this obligation, too, was widely ignored. The 1867 Associations Act enabled the creation of association-based funds and this is how the general workers' health insurance and invalidity relief funds were established in Vienna in 1868. In 1873, the association of the general workers' health and invalidity relief funds was founded.

Rapid population growth in the second half of the nineteenth century and the social problems that ensued prompted the government to introduce protective labour legislation and a number of other social policies.

In 1887/1888, the industrial accident and health insurance scheme for workers was introduced following the model of Bismarck's social policy programme in Germany. This scheme was to become the foundation of today's social security system. The nineteenth century health insurance plan included free medical treatment, free medicines and adequate sickness benefits. Industrial

accident insurance provided for injured persons' and survivors' benefits. The workers themselves funded two thirds of the costs of the system (compulsory insurance), whereas the remaining third was funded by employers. This social health insurance scheme was administered by self-governing bodies and did not receive any government grants. In 1889, a law on miners' associations was adopted which established a health and pension insurance scheme for miners.

Up until the First World War these social achievements were largely maintained and even expanded with the introduction of work accident insurance for railwaymen. Although the Act on Active Duty, which applied throughout the First World War, repealed existing protective labour regulations, some progress was made in the social insurance domain (for example, increases in sickness benefits and lengthening the time that benefits could be received, and the abolition of workers' contributions to industrial accident insurance).

The collapse of the Austro-Hungarian monarchy and the rise of the Social Democratic movement resulted in an upgrading of the entire social security system. Improvements included the introduction of unemployment insurance, the extension of health insurance to all people with employment contracts, service contracts or waged work of any kind and the inclusion of family members. The 1926 White-collar Workers Insurance Act was adopted to regulate health, work accident and pension insurance plans for white-collar workers in the private sector.

A year later, the Blue-collar Workers Insurance Act was revised (regarding health and industrial accident insurance), and an Agricultural Labourers Insurance Act was adopted in 1928. Whereas in 1890 only 7% of the population had health insurance cover, in 1930 this share was 60%.

In the following period of Austro-Fascist rule, the social security system underwent massive cuts. They included reductions in sickness benefits, restrictions to family insurance and the introduction of compulsory contributions to health insurance by pension benefit claimants. Moreover, attempts were made in 1935 to unify the social security schemes of all dependent workers (other than federal sector employees, railwaymen, agricultural and forestry labourers). In 1938, the German social security legislation was introduced in Austria. However, this did not lead to any improvements in health insurance provisions.

The post-war period brought major improvements in the welfare systems of all western democracies. In Austria, the 1947 Social Insurance Transition Act was adopted for the purposes of re-establishing an autonomously administered social security system. This was followed in 1948 by the creation of the Federation of Austrian Social Security Institutions, the parent organization of social health insurance, work accident and pension insurance institutions.

The objective was to establish a "people's insurance". The number of people covered by social insurance was roughly two thirds of the population in 1946; by 1980 it was 96%. Greater coverage was achieved by the introduction of the Farmers' Health Insurance Act and the Civil Servants' Health Insurance Act in 1965 and 1967 respectively. There was also an expansion of health benefits to include unlimited inpatient care, screening programmes and preventative services, routine examinations of schoolchildren and rehabilitation.

Beginning in 1980, the Austrian social security system came under major funding pressures due to the recession. The cost of health care grew rapidly throughout the 1980s. Most of this rise is attributable to the hospital sector, where expenditure increased much faster than expenditure on primary care services or for drugs and medicines. The reasons were to be found in the constant expansion of hospital services, as well as in the fact that both the federal government and the Länder are responsible for health care issues which, even today, makes the decision-making process in health care very difficult. Regarding hospital care, the federal government is responsible for the basic law, while the Länder are charged with the task of creating detailed legislation on how to implement health policy.

As early as 1978, the hospitals cooperation fund (KRAZAF) was established to help deal with the funding problems of the inpatient sector. An agreement was eventually reached but only after several delays. The fund was created with the objective of reforming the entire hospital finance system in Austria. The fund's membership was the same as that of the newly created structural funds which are now in operation (see the section on *Health care reforms*).

An agreement was made between the federal government and the Länder on the reform of the health care system and hospital finance system for the years 1997–2000. As part of this, performance-oriented hospital financing (LKF) was introduced at the beginning of 1997. The KRAZAF was replaced with nine Länder funds and a federal fund endowed with the monies of the social security institutions and territorial authorities previously paid into the KRAZAF. This has resulted in a number of substantial institutional changes in Austria's health care system (see the section on *Health care reforms*).

Organizational structure and management

The federal government and the Länder have agreed to ensure health care delivery within specific statutory agreements which outline the scope of their respective responsibilities. The Austrian Constitution stipulates that responsibilities for almost all areas of the health care system – with a few exceptions in legislation and implementation – lie with the federal government. The most important exception concerns the hospital sector. In this area, the federal government is only responsible for the basic law. Responsibility for enacting legislation and implementation lies with the nine Länder (states) whilst sanitary supervision of the hospital sector remains the responsibility of the federal authorities.

Delivering health care services to the population and controlling the health care system is considered to be primarily a public task in Austria. Hence, more than two thirds of Austria's health care system is funded through social insurance contributions and general tax revenue. Approximately one third is paid by private households directly. Health care services are delivered by public bodies, non-profit organizations, for-profit private organizations and individuals.

Organizational structure of the health care system

The organizational structure of the Austrian health care system is determined by the interaction of public, private non-profit and private players. This section discusses the organizational structure of and lines of accountability in the health care system, as illustrated in Fig. 2. The function and significance of the individual players will be described in greater detail below.

In both houses of parliament (federal level) bills on health and social policy improvement, development and reform are debated and voted on. These bills are usually submitted by the Federal Ministry for Social Security and Generations (*BMSG*). As the supervisory authority, the BMSG monitors

compliance with the laws to be implemented by the social health insurance funds and the professional bodies that represent doctors (e.g. the Austrian Medical Association) to ensure the provision of primary care.

By paying a monthly compulsory contribution to social health insurance funds,[3] people acquire entitlements to treatment as set out in the current general social security provisions. The basis of these entitlements is the concept of illness as defined by the General Social Security Act (ASVG). Austrians are free to choose their general or specialist practitioner. If doctors are "contract doctors", i.e. they have concluded contracts with the social health insurance funds, they have specific rights and duties pursuant to the provisions of the ASVG. For instance, a contract doctor has the obligation to treat patients who are enrolled with the health fund he/she is contracted with. There are regular negotiations (usually once a year) between the doctors' professional organizations and the social health insurance funds to define the number of contract doctors, the quantity of available services and the doctors' payment within a so-called general agreement (Gesamtvertrag).

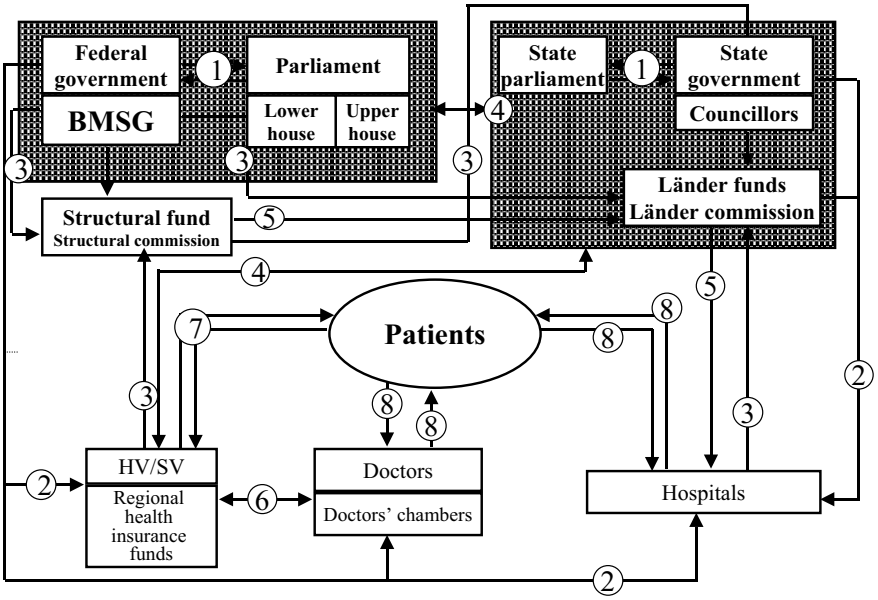
The relationship between health insurance funds and hospitals are regulated through the General Social Security Act (ASVG), the Federal Hospitals Act (B-KAG) and the Länder Hospitals Act (L-KAG). Social health insurance pays for slightly more than half of all hospital costs. Based on the division of responsibilities defined in the Austrian Constitution, the Länder are responsible for ensuring the provision of hospital care. Therefore, investment and maintenance costs, plus a portion of the current operating costs, are borne by the Länder, the federal government and the owners. In 1997, nine Länder funds were established for the purposes of hospital financing. The funds are financed through social health insurance budgets and general taxation (see the section on *Financial resource allocation*). In some Länder, they also draw upon the Länder's own resources, and in very a few Länder they include all sources of finance (i.e. also those of the hospital owners). The Länder funds are legal entities in their own right and pay for health care services per insured patient using diagnostic-related groups.

The Länder parliaments discuss and vote on bills relating to hospital care which are introduced by the state councillors.

Responsibilities of the Structural Commission, established at federal level, include decision-making on, and monitoring the implementation of, the hospital and high-technology investment plans (ÖKAP/GGP). It also undertakes initiatives on the development of the health care sector. At the Länder level, there are Länder commissions which monitor, *inter alia*, the implementation

[3] This also includes employers' contributions as they form part of the wages.

Fig. 2. Organizational structure and lines of accountability in the health care sector



Source: IHS HealthEcon 2000, *BMSG* 2000.
HV/SV = Federation of Austrian Social Security Institutions.

Notes:

1. a) Bills proposed by federal government (minister) to parliament or by state government (state councillor) to state parliament
   b) Adoption of federal bills by parliament or of state bills by state parliaments
2. Health care administration
   a) at federal level (e.g. sanitary inspectors, sanitary supervision of hospitals, supervision of social security institutions and doctors' associations)
   b) at Länder (state) level (e.g. construction and operation permits, implementation of health care plans at Länder level, capital financing of hospitals)
3. Appointment of the members of the Structural Commission and the Länder commissions
4. Mechanisms of consultation
   a) between federal, state and local governments regarding legislative acts (laws, regulations) that cause additional costs;
   b) between Länder and social insurance institutions regarding shifts in health care services (between ambulatory and inpatient)
5. Mechanism of sanctions
   Unless a Land (state) complies with binding plans or provides the requisite documentation, the federal government may hold back the monies due to the respective state fund
6. Negotiations on market entry, services and rates (general agreement and individual contracts)
7. a) mandatory membership in social insurance institutions
   b) social security institutions under obligation to conclude contracts
8. a) patients are basically free to choose hospitals and doctors
   b) (public and private non-profit) hospitals and (contract) doctors are obliged to treat patients

of the performance-oriented hospital financing scheme (LKF) and compliance with the specifications of the hospital and high-technology investment plans.

The main bodies and institutions in Austria's health care system, both public and private, are identified and described in more detail below.

Public level:
- Federal ministries
- Federal Ministry for Social Security and Generations (BMSG)[4]
- Federal Ministry for Education, Science and Culture
- Länder and local communities
- Social insurance funds
- Professional bodies (Doctors' Association, Pharmacists' Association)
- Statutory associations (e.g. of psychotherapists, physiotherapists)
- Public hospitals.

Private level:
- Private health insurance
- Private hospitals (both not-for-profit and for-profit)
- Welfare organizations
- Self-help groups.

Public Level

Federal ministries

*Federal Ministry for Social Security and Generations (*BMSG*)*

The Federal Ministry for Social Security and Generations is responsible for health care administration at the federal level and has had its own State Secretariat for Health since April 2000.

The responsibilities of the BMSG include:
- general health care policies
- protection of the health of the population from hazards or threats
- training of health care professionals, and those employed in public hygiene and sanitation, health education and health counselling
- matters of preventative care and occupational medicine

[4] The name of the Ministry of Health has changed over the years depending on the grouping of social sector activities by different political administrations.

- hygiene and vaccination issues
- fighting infectious diseases
- protection against exposure to radiation from its use in medicine
- fighting substance abuse
- pharmacies and pharmaceuticals
- working conditions of health personnel.

The Supreme Health Board acts as the advisory and expert body for the Minister of Health. It currently includes 19 members chosen and appointed for three years by the Minister of Health from among representatives of the various specialist fields of medical science and health care planning and finance experts. This Supreme Health Board is a medico-scientific board of experts, whose special task is to decide whether certain activities are to be regarded as medical activities and what is to be considered state of the art in medical science. Board discussions cover a wide range of issues, such as vaccination programmes, the "maternal and child health programme", or reproductive medicine and its availability in Austria.[5] The members of the board work in an honorary capacity and are requested to observe strict confidentiality unless the Federal Minister of Health expressly agrees to make public certain items that have been discussed. However, any recommendations made by the Supreme Health Board are mere proposals and not binding on decisions in health care policy. The Supreme Health Board convenes a plenary meeting two or three times a year. It has sub-committees dealing with topics such as vaccinations, AIDS, the mother and child passport and dentistry and prevention.[6] There are a number of other advisory boards, commissions and test laboratories assigned to the BMSG. Moreover, a free-standing health research institute was established in the 1970s (the Austrian Federal Institute for Health Care) to assist the BMSG specifically in matters of research and planning.

The federal government funds slightly less than 2% of all health spending. This comparatively low funding share is due to the provisions of the Austrian Constitution and its associated legislation. The tasks of the federal government and its authorities are largely delegated to the Länder and/or social insurance funds within the framework of indirect federal administration arrangements, while the federal authorities retain a significant role in terms of its supervisory bodies for health law enforcement and training issues. Health care administration

[5] In July 1999, a federal law was adopted which resulted in the creation of a fund for financing in vitro fertilization.

[6] At Länder level, there are the Länder health boards. If hospitals are to be restructured, if outpatient departments are to be established, or if new hospital clinical directors are to be appointed, the health board of the respective Land must be consulted.

by federal authorities is mainly indirect. Another function of the BMSG is to act as the supervisory authority for social health insurance funds and doctors' professional organizations (see the section on *Professional bodies*).

To ensure that the federal authorities are able to contribute to health care matters, and particularly in the hospital sector, fixed-term statutory agreements are negotiated and agreed between the federal government and the Länder. This enables federal authorities to coordinate, control and co-design policies.

Federal Ministry for Education, Science and Culture
This ministry is responsible for the university training of general practitioners and specialists. In addition, the ministry appoints professors at faculties of medicine in the university teaching hospitals in Vienna, Graz and Innsbruck, and ensures that the federal government shares the cost of establishing, equipping and operating university teaching hospitals (see Table 25, teaching hospitals).

Federal Ministry of Justice, Federal Ministry for National Defence
These ministries are the owners of some hospital wards and hospitals (e.g. army hospitals).

Länder and communities

Legislation at Länder level is made by the Länder parliaments, whose members are elected by proportional representation. The laws are monitored and implemented by the respective Länder (state) governments elected by the parliaments and headed by state governors. The state government is the supreme health authority of a Land. It is assisted by the Office of the State Government and by a state health board. Thus, every state government has its own health department. It is directed by a doctor in the civil service, the so-called state director of health. The office of every state government relies on the expert advice of its own state health board.

In addition, every district administration has its own health department headed by a district medical officer. The tasks of medical officers are also fulfilled by a number of counselling and advisory centres (prenatal clinics, vaccination offices, AIDS centres, etc.).

A few responsibilities are held by the communities (local governments), e.g. those for the local sanitary inspectors. Some communities also have joined forces to create health subdistricts. The communities have their own experts to consult, namely their respective community or subdistrict medical officers.

The supervisory authorities at this local level would include administrative authorities such as the district administration, the state governor for delegated

federal responsibilities, and state government for delegated state responsibilities.

The Federal Hospitals Act of the federal government sets out that every Land is obliged to ensure hospital care for people in need of such care within its territory. In compliance with the provisions of the hospitals plan, the Länder define the structure of inpatient acute care in both quantitative and qualitative terms. The state hospital plans in turn have to comply with the specifications of the Austrian hospital and high-technology investment plans (ÖKAP/GGP) (see the section on *Health care reforms)*. The health insurance funds have no say in these matters. Another form of influencing the performance structure of every hospital is the Länder's power to draw up hospital budgets and/or approve these budgets.

Social (welfare) assistance is the responsibility of the Länder or the communities. It is organized strictly according to the principle of subsidiarity. Individuals are entitled to social assistance if neither gainful employment nor social insurance and other benefits, nor family means are sufficient to ensure material and social security. Social assistance benefits include cash benefits, sickness benefits, nursing care benefits and residential or institutional placement. The standard rates for cash benefits differ from Land to Land. In addition, the Länder have considerable room for manoeuvre regarding entitlement conditions and criteria.

Long-term care, too, is dealt with at Länder level. However, to ensure uniform nationwide criteria for the provision of long-term care and its benefits, the federal government and the Länder have established a statutory agreement. In it, the Länder undertake to provide a decentralized expansion of outpatient, inpatient and intermediate (day centres) services throughout Austria with due regard to certain minimum standards (see the section on *Long-term care*).

Länder and communities finance around 16% of Austria's health care expenditure. The planning responsibilities of the Länder include introducing state hospitals plans pursuant to the specifications of the ÖKAP/GGP, conducting needs assessments and setting sanitary regulations. Länder and communities have an important role to play in establishing, implementing and monitoring the various forms of public health care delivery. The Länder's administrations have special departments to combat notifiable infectious diseases. Moreover, they are responsible for vaccination and counselling services, health promotion and collecting state health statistics. The Länder are also responsible for the employment of staff in public health institutions and for supervising compliance with training regulations for health care professionals other than doctors.

Social insurance funds

The social insurance system is a separate entity from the rest of the health system. Responsibilities for legislation and implementation are held by the federal government. However, the federal state has delegated implementation to Austria's social insurance funds, which are self-governing bodies. Social insurance consists of health insurance, pension insurance and work accident insurance.[7] Social health insurance is a compulsory scheme based on the 1956 General Social Security Act (ASVG) and its respective amendments.

Austria's social insurance funds cover almost all labour force participants and retirees with the exception of a few smaller groups of the population. Access to voluntary insurance plans is largely without restriction. The most important among these voluntary plans is voluntary health insurance. Since health insurance coverage extends to the family members of compulsorily or voluntarily insured persons, 99% of the population have health insurance cover, and only 1% are without health insurance. The latter are mainly free-lance professionals (such as notaries, civil engineers). Social assistance claimants and prisoners are not covered by statutory health insurance schemes per se, but they receive health benefits and services from the state authorities. Since 1996, insurance protection has been further extended (see the section on *Health care reforms*).

Austria boasts 27 social insurance funds.[8] They are united within an umbrella organization, the Federation of Austrian Social Security Institutions. The Federation safeguards the general interests of social insurance funds and represents them in matters of joint concern. It may draw up binding guidelines, policy proposals, expert opinions and position papers, and concludes general agreements with interest groups. It also plays an important role in the development of social insurance law and general health care in Austria. Other important tasks are the administration of insurance data and the compilation of statistics.

Austria's social insurance funds are classified by occupational groups (miners, self-employed in trade, commerce and industry, farmers, railway employees, civil servants, blue-collar workers, white-collar workers, etc.) and/or by region. The largest funds are the pension insurance funds for blue-collar workers and white-collar workers, the nine regional health insurance funds in the individual Länder (for employees other than civil servants) and the general occupational accident insurance fund (for the self-employed, schoolchildren and students and for employees other than civil servants). In addition, there are

[7] Unemployment insurance is separate and administered by the public employment service.

[8] In November 2000, the employer-based health insurance fund of Austria's government printing office was integrated into Vienna's regional health insurance fund, thus reducing the number of social insurance agencies from 28 to 27.

two social insurance funds for the self-employed (farmers and the self-employed). The health and work accident insurance scheme for civil servants is administered by yet another separate insurance fund. Moreover, there are ten company health insurance funds, one insurance fund for miners and one for Austrian railway workers. 81% of all insured people are insured under the General Social Security Act (ASVG), 9.3% under the civil servants' health and work accident insurance scheme, 5.4% in the social insurance fund for the self-employed and 4.3% in the social insurance fund for farmers.

The contribution rates to health insurance vary between 6.4% and 9.1% of the contribution base (there is a ceiling on insurable earnings) depending on insurance fund. Half of the contributions are paid by the workers themselves, and the other half is paid by the employer (see Table 7).

Social health insurance contributions finance slightly more than half of Austria's total health spending. The social health insurance scheme is responsible for ensuring the provision of primary medical care to the population. This responsibility includes planning and regulatory tasks. Usually once a year, health insurance officials meet with the regional doctors' representatives to negotiate new contracts for practising physicians, the range of services to be provided and the rates of reimbursement. General agreements are concluded between the doctors' professional bodies and the health insurance funds, which are similar to collective agreements.

Professional bodies

The Austrian Medical Association is the professional representative body for doctors. It is organized like a "holding company" with nine Länder-based doctors' associations as its members. The main functions of the regionally organized doctors' associations are to have some say in the training of doctors, in the awarding of contracts with the health insurance funds, and to administer the register of doctors (inclusion on the register qualifies a physician to pursue his/her profession independently). Membership of the regional associations is compulsory for every doctor. The Länder doctors' associations negotiate with the health insurance funds to decide the number of contracts between doctors and health insurance funds to be allocated (known as a location plan), the range of services to be provided and fees to be paid over a specific period of time. There is also a pharmacists' association which represents the professional interests of pharmacists.

Statutory associations

Midwives are united in a statutory interest group called the Austrian Association of Midwives. Other health professions (psychotherapists, psychologists, medico-technical staff, physiotherapists, freelance nurses, etc.) are organized

into voluntary associations. Some of these are entitled to conclude collective agreements. Official representation is important for health professionals as the volume of services and the rates of reimbursement are negotiated and defined by general agreements. The professional associations elect board members and nominate delegates to conduct negotiations with the relevant health insurance funds and the Federation of Austrian Social Security Institutions. Membership in these associations is not mandatory. However, the rates of remuneration and services are applicable to all practising professionals no matter whether they are members of an association or not. This agreed price is the one paid by Austria's health insurance funds. Any amounts exceeding these reimbursable rates must be paid by patients themselves.

Public hospitals

In 1998, 142 of Austria's 325 hospitals were public hospitals. Public hospitals provided two thirds of hospital beds (50 211 beds). There were 37 private non-profit hospitals with 5585 beds. 147 hospitals are so-called "fund hospitals", that is primarily public and non-profit acute care hospitals (not including emergency hospitals) which are financed through public resources, i.e. Länder funds (see Table 17). Fund hospitals had a total of 51 872 beds in 1998, which corresponds to 72% of the total number of beds. Fund hospitals delivered care to roughly 2 million patients in 1998 (see the section on *Secondary and tertiary care*).

Private Level

Private health insurance

Since almost the entire Austrian population is covered by social health insurance, Austrians take out private health insurance policies mainly to cover the cost of more comfortable rooms and services in hospitals (i.e. to pay for the so-called "special class") or to finance visits to non-contract doctors (i.e. practising physicians not under contract with the patient's social health insurance fund). Roughly one third of the population is covered by (supplementary) private insurance. Private health insurance finances approximately 7% of total health expenditure and approximately 8% of hospital costs in Austria.

Private hospitals

There are 49 hospitals in Austria which are run by private individuals/ companies. They account for around 5% of all hospitals beds (see Table 17) and are mainly sanatoriums.[9]

[9] The definition of "hospital" now also includes outpatient clinics. A number of doctors have begun to establish outpatient clinics (day surgeries) recently as extensions of their private practice. However, these are not included in these figures.

Private (for-profit) hospitals are not obliged to admit patients. Admission is subject to a patient's purchasing power and/or the extent of his/her private health insurance coverage. There is absolute freedom of contract between private hospitals and social insurance funds. Private legal contracts are drawn up every year to define a budget between social insurance funds and private hospitals. Private hospitals offer patients the option of being treated by a doctor of their choice. Doctors who treat their private patients in private hospitals give part of their fee to the private hospital for using its facilities.

Welfare organizations and self-help groups

This sector is characterized by great heterogeneity: a large number of very different organizations deliver services to disadvantaged or marginalized groups in society. In addition to public facilities run by the Länder and communities, there are roughly 2300 smaller organizations and 20 larger organizations (some of the latter exist nationwide) which offer social services (including home nursing).

The most important organization providing emergency and ambulance services is the Austrian Red Cross. The Red Cross is also a major supplier of blood products. Social services and home nursing are some of its other fields of activity. Just like most large welfare organizations, the Red Cross has a federalist organizational structure. It consists of an umbrella organization and nine Länder associations composed of district and local centres. The Red Cross is capable of mobilizing volunteers to deliver services, a feature that is also true of other non-profit organizations. The financial basis of welfare organizations are the fees they charge for transport services (which are paid by health insurance funds), general tax revenue, donations and cost sharing arrangements.

Around 600 grassroots self-help groups offer assistance for specific health problems.

In summary, the most important changes in the organizational structure of the health care system in recent years have taken place in the hospital sector. The introduction of funds as new legal entities has resulted in the reorganization of financial flows, of decision-making processes and of incentive systems for the largest sector of the health care system. At the end of 1996, an agreement was reached between the federal government and the Länder pursuant to Article 15a of the Austrian Constitution (B-VG) concerning the reform of health care and hospital financing from 1997 to 2000. The agreement consists of the introduction of a performance-oriented hospital financing system (the path to this new system had been paved by the hospital cooperation fund, KRAZAF), the dissolution of the KRAZAF, the creation of a structural fund plus nine

Länder funds, as well as the establishment of a structural commission at federal level and of nine Länder commissions at Länder level (see the section on *Health care reforms*).

Planning, regulation and management

There are three forms of relationships between the health insurance funds and the suppliers of services in the Austrian health care system:

1. **Integrated**: Full integration of supplier and purchaser is found in outpatient clinics. The health insurance funds operate 134 clinics. The services they offer depend on the fund and may range from diagnostic services and therapy to dental care. In addition, social insurance funds run emergency hospitals, spas and rehabilitation centres.
2. **Semi-integrated**: The health insurance funds primarily finance the current operating costs of hospitals and thus also a major portion of the wage costs of hospital employees.
3. **Contracted**: In the field of primary care, general agreements are made between the social health insurance funds and the doctors' associations. The range of services and the level of reimbursement for those services are negotiated between the two sides. The health insurance funds and the Federation of Austrian Social Security Institutions act as a monopsonist purchaser, whereas the doctors' representatives act as monopoly supplier.

Planning and regulation

In financial terms, Austria's health care system is part of the government sector – expenditure on health care and invalidity account for roughly one third of total government expenditure. As in almost all countries with social security systems, public and private services co-exist on the supply side. Since 1990, coordinated planning of facilities and services at federal and Länder levels and budget consolidation have been the most important issues for the development of Austria's health care system (see the section on *Health care reforms*).

The most important foundation for the future development of the hospital sector is capacity planning and its shift towards health service delivery planning at each level of hospital care. In primary care, too, the system is subject to planning and regulation. Doctors may only set up a contracted practice subject to the specifications in the location plans, while the quantity and price of services are negotiated between the Federation and the doctors' associations. This is how market access is regulated for contract doctors.

Health expenditure planning within the federal budget covers the federal government's expenditure on hospitals, the so-called 'federal grants' (see Table 25). Planning on how to finance primary care is in the hands of the social insurance funds which means that the social insurance funds play a key role in raising the necessary financial resources (see the section on *Financial resource allocation*).

Planning and regulation at federal level

Since 1978, the federal government and the nine Länder have concluded fixed-term agreements on hospital financing in Austria. As part of this agreement, the hospitals cooperation fund (KRAZAF) was created. The KRAZAF received monies from all the territorial authorities involved in hospital financing, but the main sources of revenue were the social insurance funds. In addition to distributing the funds, the main task of the KRAZAF was to ensure supra-regional planning and control of the hospital sector.

Based on a new agreement between the federal government and the Länder on the reform of the health care system and hospital finance system for the years 1997–2000, a performance-oriented hospital financing scheme (LKF) and a binding hospitals plan were introduced at the beginning of 1997. The KRAZAF was replaced by nine Länder funds and one structural fund.

The Structural Commission also created under this agreement operates at the federal level, whilst the nine Länder commissions are responsible at Länder level for the implementation of the Austrian hospital and high-technology investment plan (ÖKAP/GGP) and the improvement of the LKF system (see the section on *Health care reforms*).

Pharmacies

Regulations for the provision of pharmaceuticals are under the full authority of the federal government. At present, the Austrian population is served by about 1100 licensed public pharmacies.

In order to ensure a balanced supply throughout Austria, some 1000 practising doctors operate so-called "house" pharmacies, i.e. they keep stocks of medicines to dispense to their patients. The authorities also must approve this activity. In addition, there are more than 50 hospital pharmacies designed to keep sufficient stocks of drugs and pharmaceuticals for hospital use. The conditions for establishment of pharmacies based on needs assessment were relaxed in 1998, therefore we may expect greater competition between pharmacies in future. Pharmacies may only distribute medicines which have been approved by the Federal Ministry for Social Security and Generations (BMSG) pursuant to the provisions of the Medicines Act.

Pharmaceutical wholesalers purchase medicines from manufacturers and distribute them to public pharmacies or hospital-based pharmacies. However, pharmaceuticals must not be distributed directly to the consumer or the practising doctor unless the latter is authorized to run a "house" pharmacy since the distribution of medicines to the population should take place primarily through pharmacies.

The wholesale trade in drugs and pharmaceuticals also requires a licence. There is a plethora of legal provisions regulating wholesale trade. They have either a direct impact on the conduct of wholesale businesses (trade regulations, Medicines Act) or an indirect impact on their finances (e.g. price regulations).

Pharmaceutical prices

All stages of production and distribution in the pharmaceutical market are subject to government price regulations. The BMSG is responsible for the approval of new drugs. It is assisted by the Federal Institute for Medicines, which examines the documents submitted by the applicant and conducts rigorous testing to check whether new drugs meet the quality, effectiveness and safety criteria required under the Medicines Act.

In Austria, all medicines – including over-the-counter (OTC) drugs of which there are few compared to other countries – are subject to government price regulations. Under the 1992 Price Act the BMSG is entitled to fix an "economically justified maximum price". For this purpose it consults an official price commission, which is composed of representatives of the social partners (the Austrian Economic Chamber and the Federal Chamber of Labour) and the ministries concerned (i.e. BMSG, the Federal Ministry for Economic Affairs and Labour, the Federal Ministry of Finance, and the Federal Ministry for Agriculture and Forestry, the Environment and Water Management).

According to Austria's Price Act, the parties involved have to consider the national economic situation and the interests of both suppliers and consumers when fixing pharmaceutical prices. The maximum prices are determined on the basis of the costs incurred by the company filing the price application. Moreover, price comparisons are made. Changes to prices also require approval by the BMSG and such approvals are given by ordinance. In 1999, a price reporting system was established under which the licence holders of approved drugs only need to report the price of the respective drugs to the BMSG, this price being considered the maximum price. The same procedure applies to price increases. However, the system still gives authorities the power to intervene if they deem this necessary.

The wholesale price margin (mark-up on the manufacturer's price) is defined by ordinance. The current mark-up rates for pharmaceuticals for human

consumption have officially fixed maximum mark-ups and are degressively scaled.

The pharmacy price margin (mark-up on the wholesale price) is also subject to regulation. It is fixed in the Austrian medicines price register and is also degressively scaled just like the wholesale price margin. The price register includes legal regulations that allow rebates to certain buyers of pharmaceuticals such as the social insurance funds. The level of rebates granted depends on the turnover of a pharmacy (the higher the sales volume, the higher the volume discounts). In 1999, the average discount granted by pharmacies was 9.6% and 7.7% by "house" pharmacies.

Public health care services

The government policy statements of 1990, 1994, 1996 and 2000 include several objectives regarding the planning of public health care tasks. In addition to the creation of a network of health and social care districts for coordinating social and medical services throughout Austria, priority has been given to health promotion by upgrading and improving the financial basis of the "Healthy Austria Fund". Another objective mentioned in the policy statements is a re-definition of the concept of health emphasising multisectoral responsibility and people's own responsibility for their health.

Standards for medical and nursing care

University training and postgraduate training of doctors are both strictly regulated. Training responsibilities are shared between the Ministry of Science on the one hand and the Department of Health on the other. Postgraduate training matters are set out in the Doctors' Act and the doctors' training regulations.

The Austrian Medical Association cooperates with the Länder doctors' associations in handling applications to practice professionally and administering a register of all doctors qualified to practice in Austria . A doctor may only practice when he/she is included on the doctors' register and once on the register is qualified to open his/her private practice (known as the freedom of establishment).

Accession to the European Union has brought about a number of new regulations in medical training. These focus on harmonizing training and credits transfer. Access to postgraduate training in Austria is also open to EEA citizens if they have completed the appropriate medical studies.

However, problems arise in conjunction with scarce training resources. Currently, there are roughly two medical graduates waiting for each specialist training place. Projections indicate, however, that no-one will have to wait for a postgraduate training post from 2008.

In response to the increased demand for care services within the public health care system, a new law on health and nursing care was adopted in 1997. This is the first law to define the spheres of sole responsibility for qualified nursing staff and to give a legal basis to this aspect of health care.

EU membership has also initiated some changes in the training and work of midwives. These changes focus on coordinating various activities to ensure consistency and continuity in obstetric care. Further changes include the extension of the number and types of midwives' activities and the lifting of the training monopoly of federal authorities.

Supply of health professions

Access to medical school is not restricted. However there is a high dropout rate. There are access restrictions for other health professions – either entry exams or limited training places. Doctors are subject to indirect market barriers, such as having to "queue up for specialist training places", or having to wait for contracts with social health insurers. The distribution of practising doctors is uneven across Austria. Practices in remote rural areas occasionally remain vacant, even though they are approved locations, i.e. insurance funds would contract with doctors.

In 1997, the law on hospital working hours for doctors and other health care professionals, which was designed to meet EU requirements, was adopted. Implementation is the responsibility of the Länder, but so far they have been rather slow in responding because strict application of the working time directive would result in a substantially greater demand for doctors, in particular for specialists at hospitals. However, compliance with the statutory working time directive is absolutely necessary in order to maintain and improve the quality of care.

Quality assurance in hospitals

With the amendment to the Federal Hospitals Act (B-KAG) in 1993 the legal framework for the implementation of nationwide quality assurance in hospitals was created. This federal law also obligates hospital owners and hospital managers to implement internal quality assurance . Quality assurance at hospitals is designed to improve quality and/or to maintain an existing high level of quality (*5,6*). The overall objective of this law is to initiate policies to improve the hospitals' quality in terms of structures, processes and results. Quality assurance is considered to be primarily the task of hospitals themselves, whereas the Federal Ministry for Social Security and Generations (BMSG), the Structural Commission and the Länder commissions are required to create the requisite external conditions. Pursuant to section 5b of the B-KAG, each hospital is also obliged to set up a quality assurance commission charged with initiating,

coordinating and supporting measures of internal quality assurance. Moreover, within the development of service delivery planning in the hospital sector it is intended to introduce external quality assurance, thereby attaining also allocation targets.

Pharmaceutical industry

The 1993 "economic stimulation and stability pact" agreed between the federal government, the Länder, the communities, the social partners and the Austrian central bank was the starting point for stabilising pharmaceutical expenditure growth to below general price inflation. In 1998, a new regulation on how to compile the approved list of drugs and therapeutic products came into force. It regulates the inclusion of pharmaceuticals on the list and the procedures pertaining to changes in prices and entries (*7).* This regulation has resulted in price reductions at all price levels. In addition, a pharmaceuticals agreement was reached with the Economic Chamber – representatives of the pharmaceutical industry and pharmaceutical wholesalers. Companies may join the agreement. It regulates advertising, availability, etc.

Planning and regulation by social insurance funds

Social health insurance funds also play a role in planning and regulating Austria's health care system. They award contracts to doctors, assess drugs, dressing materials, remedies, etc. for entry into the approved list of drugs and therapeutic products, and negotiate fees to doctors and other suppliers of medical or therapeutic services.

Primary care

"Contract doctors", i.e. doctors who have a contract with one or several insurance funds, primarily deliver medical treatment to patients who are covered by social health insurance. Roughly three quarters of all practising physicians are contract doctors. Reimbursement of their services is based on general agreements that are concluded between the Federation of Austrian Social Security Institutions and the Austrian Medical Association while individual contracts (the contents of which are largely based on these general agreements) are concluded between individual doctors and individual insurance funds. The government has no power to influence matters in this area.

Social insurance contracts with doctors are awarded under a "location plan" negotiated between the regional health insurers and the Länder doctors' associations. This plan regulates both the number of contract doctors and their distribution. The plan is established on needs assessment, with due regard for existing medical care provided by hospitals in any given catchment area. Group

practices do not yet exist in Austria. After years of discussion, an amendment to the Doctors' Act on running group practices from 2001 is being introduced (see the section on *Health care reforms)*.

To better monitor the services provided in primary care, health insurance funds each have a head doctor. Any services not (yet) regulated by contracts are subject to authorization by such supervising head doctors. If there is a medical indication, and if the services can be provided within the legally stipulated range of services, these head doctors may authorize their use (and thus their coverage by social health insurance). In addition, head doctors have the function of checking the prescribing habits of contract doctors and may, if these deviate greatly from the usual standard, initiate audits. This means that social health insurers have control over the use of resources in primary care.

Pharmaceutical prices

The Austrian population is supplied with drugs and pharmaceuticals only through licensed pharmacies or through doctors entitled to run "house" pharmacies. Public pharmacies purchase their pharmaceuticals from wholesalers, while doctors with house pharmacies buy them from public pharmacies.

Once a drug is approved and registered by the BMSG, the manufacturer of this drug usually submits an application to the Federation of Austrian Social Security Institutions for listing of the drug on the approved list of drugs and therapeutic products. This registration procedure tends to push the drug's price below the maximum price permitted under the price law as the Federation, being a bulk purchaser, usually receives rebates.

Prices for dental services

Based on statutory regulations, the dental clinics operated by the social health insurers were, until 1998, only allowed to offer so-called removable dentures plus preservative, surgical and orthodontic treatments. Corresponding law prohibited those outpatient clinics from rendering any fixed dentures services (dental crowns). This service was reserved to contract dentists in private practice. The 1998 amendment to the General Social Security Act (ASVG) sets out that social health insurers' dental clinics also may provide fixed dentures under certain conditions. This has an indirect price-regulating effect on the prices of dentists as the dentures made at the social insurers' own clinics are much cheaper than those made by dentists.

Management

Every hospital is managed by a body of managers (collegial system). It usually consists of three members, one representing doctors, one nursing staff and one

administrative staff. Depending on the kind of hospital, this management board may also include a representative for technical staff. Under the Federal Hospitals Act, this collegial system of management must also ensure the implementation of quality assurance policies. Any decisions affecting day-to-day operation have to be consensual. Either the competent authorities or the hospital operators (owners) recruit staff for top positions through formal invitations for applications. In the primary care sector, management of care delivery is up to the contracting parties of social health insurers. The social health insurance funds have no influence on how general/specialist practitioners arrange their opening hours, they may only define the total number of hours.

The individual social insurance funds are managed by self-governing bodies composed of representatives of the social partners (see the section on *Politics)*. Formally, the legal framework allows these bodies to have great autonomy. However, their *de facto* autonomy is greatly restricted, as laws regulate most benefit claims and entitlements. In addition, social insurance funds may also pursue health policy activities under the respective legal provisions.

Decentralization of the health care system

Under indirect federal administration arrangements, the federal government delegates the tasks of public health administration to the Länder. These include tasks such as sanitary and hygiene audits. The implementation of social insurance laws is up to the social insurance funds and constitutes a separate sphere of responsibility. With regard to hospitals, the federal government only formulates the basic law, while the Länder are charged with its implementation. The Länder, in turn, delegate their responsibilities for emergency care and social services. The responsible Länder authorities usually delegate the provision of social services to welfare organizations.

The creation of Länder funds to handle hospital financing is yet another step towards decentralizing the health care system or delegating responsibility.

Table 5 serves to illustrate the extent of the central government's planning and regulatory powers for the most important health care sectors. The categories used in this table only refer to the supply side of the listed sectors.

In the inpatient sector the territorial authorities have a great deal of planning and regulatory power, the responsibilities of the Länder being defined by the Austrian Constitution. Since insurance funds and hospital owners no longer negotiate the standard daily rates to finance the operating costs of hospital care, and since the financial resources of the social health insurers are now budgeted, the relatively small planning and regulatory authority of social

Table 5. Planning and regulation in the health care system

	Federal government[a]	Länder and/or communities	Social insurance
Inpatient sector	strong planning power weak regulatory power	strong planning and regulatory power	regulatory power not very strong
Primary sector	planning and regulatory power not very strong	planning and regulatory power not very strong	strong planning and regulatory power
Public health services	planning and regulatory power not very strong	strong planning and regulatory power	neither planning nor regulatory power
Pharmaceuticals	planning power not very strong strong regulatory power	neither planning nor regulatory power	planning power not very strong strong regulatory power

Source: IHS HealthEcon 2000.

[a] The federal government has supervisory authority over social insurance agencies.

insurers in the hospital sector has become marginal. But the social insurance funds are involved in health planning.

If we disregard the territorial authorities' responsibilities for training, the social insurers have the greatest planning and regulatory power in the primary care sector. This also applies to drugs and pharmaceuticals, although the federal government has substantial regulatory authority in this sector as well.

Health care finance and expenditure

Main system of finance and coverage

Roughly half of health expenditure in Austria is financed through social health insurance contributions. One fifth is raised through general taxation. More than a quarter is financed through private households.[10] The 1998 level of health care spending was recalculated in 2000 based on the EU-wide ESA95 system. The new EU method of calculating health expenditure has only been applied retrospectively up to 1995. This change in method of calculation has affected the entire national accounting system and thus also GDP calculations, which – like health care expenditure – have been markedly different from 1995 onwards. Tables 6a and 6b list the respective figures from 1985 to 1994 and from 1995 to 1998. There is little merit in comparing the development of health care spending across these periods given the two methods of calculation. For this reason the periods from 1985 to 1994 and those from 1995 to 1998 are discussed separately.

Development of health care expenditure 1985–1994

In 1994 total health spending as a proportion of GDP was 8.1%, public expenditure on health was 6.0%. Public expenditure on health rose by 0.9 percentage points from 5.1% of GDP in 1985 to 6.0% of GDP in 1994, out-of-pocket expenditure by 0.5 percentage points from 1.6% of GDP in 1985 to 2.1% of GDP in 1994. There was a clear shift of financial burden towards private households. In 1994 private expenditure on health accounted for 26.2%, up 2.3 percentage points from 23.9% in 1985. The share of public expenditure on health was 74.4% in 1994, 1.7 percentage points less than in 1985.

[10] The Austrian Central Statistical Office (Statistik Österreich) calculates – as initiated by the OECD – health expenditure under the national accounting system. Health expenditure calculations have undergone a number of revisions and refer to the final consumption of goods and services, i.e. they only give an indirect account of health care financing.

The social insurance funds accounted for 70% of public expenditure on health versus roughly 20% by the Länder, communities and federal government.

Table 6a. Health care expenditure 1985–1994 using ESA79

	1985	1990	1991	1992	1993	1994
Total expenditure on health (THE) in Mio. ATS	91.5	130.6	140.8	157.3	171.2	180.4
Public expenditure on health (PuEH) in Mio. ATS	69.6	96.0	103.4	115.6	127.0	134.2
				% PuEH		
1) Social insurance funds	71.3	71.9	70.9	69.9	69.4	70.6
2) Länder and communities	17.0	16.5	17.8	18.3	18.3	18.2
3) Federal government	0.8	0.7	0.3	0.3	0.3	0.4
Public consumption, health[1]	89.1	89.2	88.9	88.6	88.1	89.2
Public investments, health	7.6	7.0	7.1	7.3	7.6	6.5
Transfer to private households, health[2]	3.3	3.9	4.0	4.1	4.3	4.3
Private expenditure on health in Mio. ATS (PrEH)	21.9	35.0	37.8	42.4	45.2	47.3
				% PrEH		
4) Direct payments[3]	51.5	48.6	49.9	48.4	48.9	49.5
5) User charges[4]	30.6	35.1	34.0	35.8	35.9	36.6
6) Private health insurance[5]	17.9	16.3	16.1	15.8	15.2	13.9
				% TEH		
Public expenditure on health	76.1	73.5	73.4	73.5	74.2	74.4
Private expenditure on health	23.9	26.8	26.8	26.9	26.4	26.2
			% of gross domestic product (GDP)			
Total expenditure on health	6.7	7.2	7.2	7.6	8.1	8.1
Public expenditure on health	5.1	5.3	5.3	5.6	6.0	6.0

Sources: Gesundheitsausgaben in Österreich laut OECD/VGR-Konzept, Statistik Österreich, department 7, national accounts and IHS HealthEcon, February 2000.

1 Public consumption breaks down as follows: payments by social insurance institutions, Länder, communities and federal government; payments by state hospitals (organized as private companies and located in Burgenland, Carinthia, Styria, Tyrol) included till 1996, and payments by Länder hospital funds included as from 1997.

2 Non-profit hospitals included.

3 1985–1994: hospital services, pharmaceutical products, therapeutic products.

4 1985–1994: medical services including “no-invoice deals”.

5 1985–1994: private health insurance.

6 Private expenditure on health has been adjusted for public investments and transfers. The amounts shown in the table for private and public expenditure are not adjusted.

Table 6b. Health care expenditures 1995–1998 using ESA95

	1995	1996	1997	1998
Total expenditure on health (THE) in Mio, ATS	206.7	215.4	207.0	216.2
Public expenditure on health (PuEH) in Mio, ATS	148.6	152.0	146.9	152.4
		% PuEH		
1) Social insurance funds	–	–	–	–
2) Länder and communities	–	–	–	–
3) Federal government	–	–	–	–
Public consumption, health[1]	91.3	90.8	94.3	95.1
Public investments, health	4.4	4.6	3.3	3.3
Transfer to private households, health [2]	4.3	4.6	2.4	1.6
Private expenditure on health in Mio, ATS	52.9	57.0	55.6	57.5
		% PrEH		
4) Direct payments[3]	49.6	48.1	48.9	49.4
5) User charges[4]	37.2	38.8	37.6	37.8
6) Private health insurance[5]	13.2	13.1	13.5	12.8
		% GGA		
Public expenditure on health	74.3	73.8	71.0	70.6
Private expenditure on health	25.7	26.2	29.0	29.4
		% of gross domestic product (GDP)		
Total expenditure on health	8.7	8.8	8.2	8.3
Public expenditure on health	6.3	6.2	5.8	5.8

Sources: Gesundheitsausgaben in Österreich laut OECD/VGR-Konzept, Statistik Österreich, department 7, national accounts and IHS HealthEcon, February 2000.

1 Public consumption breaks down as follows: payments by social insurance institutions, Länder, communities and federal government; payments by state hospitals (organized as private companies and located in Burgenland, Carinthia, Styria, Tyrol) included till 1996, and payments by Länder hospital funds included as from 1997.

2 Non-profit hospitals and ambulance services included.

3 1995–1998: inpatient health services, medical products, appliances and equipment.

4 1995–1998: outpatient health services including “no-invoice deals”.

5 1995–1998: health-related insurance benefits.

6 Private expenditure on health has been adjusted for public investments and transfers. The amounts shown in the table for private and public expenditure are not adjusted.

Development of health care expenditure 1995–1998

Total expenditure on health was 8.3% of GDP in 1998 whilst public expenditure on health was 5.8% of GDP. Public expenditure on health declined by 0.5 percentage points from 6.3% of GDP in 1995 to 5.8% of GDP in 1998 and private expenditure remained roughly constant and totalled 2.2% of GDP. Like the 1985 to 1994 period, the shift towards private expenditure continued: in

1998, private expenditure as a percentage of total expenditure on health was 29.4% and thus 3.7 percentage points higher than in 1995 (25.7%). Public expenditure on health was 70.6% in 1998. This is a decrease of 3.7 percentage points over 1995.

Payments by social insurance funds, Länder, communities and federal government as a percentage of total public expenditure on health amounted to 95% in 1998.

In 1998, roughly half of private expenditure on health was used for purchasing over-the-counter (OTC) pharmaceutical products (vitamins, clinical thermometers, etc.) and for therapeutic products, such as spectacles. Slightly less than two fifths were spent on medical services (dental services included) and on services provided by health professionals other than doctors. Whereas the share of out-of-pocket payments on therapeutic and medicinal products remained constant throughout the period from 1995 to 1998, that of medical and non-medical services rose slightly. The share of private health insurance expenditure dropped very little.

Health insurance coverage

People in Austria cannot choose their social health insurance fund. They are assigned to social insurers according to their occupation or profession. Unemployment benefit claimants are automatically insured and fully entitled to all cash benefits and benefits in kind.

For the most part, enrolees of all insurance funds have a legal claim to benefits. This means, the insured person may enforce his/her claims in court. In addition, there are voluntary benefits offered by insurers (e.g. stays at health spas).

Entitlement to, and level of health insurance benefits does not depend on the amount of contributions paid. Benefits are primarily benefits in kind. In addition, there are a number of cash benefits. Social health insurance covers illness, the inability to work because of illness or pregnancy, and preventative health care services.

Austria's comprehensive social health insurance coverage is based on the notion of illness as defined in the social insurance laws and regulations. This definition is based on a scientific and curative approach to illness. It says that "health, the capacity to work and to meet vital personal needs shall be restored, strengthened or improved if possible". Private health insurance plans include a similar concept and definition. Any person feeling ill may consult a doctor without having to show visible signs of illness. Preventative health check-ups

have been explicitly introduced for people who are not ill. Insurance coverage also extends to benefits in kind and cash benefits for the treatment of work accidents and occupational diseases.

Coverage of the General Social Security Act (ASVG)

Roughly 80% of the Austrian population are insured under the General Social Security Act (ASVG). This group mainly includes blue collar workers and white collar workers. Medical care is provided in the form of benefits in kind. For a number of services co-payments need to be made (see the section on *Out-of-pocket payments*). Those in part-time employment may opt into social insurance on a voluntary basis (see the section on *Organizational structure and management*).

Table 7 lists the contribution rates for different social health insurance funds. The contributions for work accident insurance are borne by employers. In 2000, the contribution rates were: 1.4% of wages and salaries for blue-collar and white-collar workers, 1.4% also for those who voluntarily opt in, 0.47% of salary for civil servants and 1.9% of earnings for farmers. The self-employed in trade, commerce and industry, free-lancers and other self-employed people paid a lump sum of Euro 76 (ATS 1046) per month in 2000.

Table 7. Contribution rates for social health insurance in 2000

	Contribution rates total % of gross earnings	Share Employer	Employee	Insurance coverage
White collar workers	6.9	3.50	3.40	benefits in kind, patient deductibles
Blue collar workers	7.9	3.95	3.95	benefits in kind, patient deductibles
Other insured[1]	9.1	4.55	4.55	benefits in kind, patient deductibles
Civil servants	7.1	3.15	3.95	benefits in kind, patient deductibles, 20% co-payment per billed medical service
Voluntary contracts (*ASVG*)	6.5	3.25	3.25	benefits in kind, patient deductibles
Self-employed in trade, commerce, industry	9.1			20% co-payment per billed medical service, benefits in kind
New self-employed (*GSVG*)	9.1			20% co-payment per billed medical service, benefits in kind
Farmers	6.4			since 1998 under ASVG

Source: Federation of Austrian Social Security Institutions.

[1] This group includes such occupations as domestic help, tourist guide, people working for international employers.

The Austrian health care system is highly equitable as everyone, regardless of income or employment status, has almost unlimited access to all services delivered. Patient deductibles are levied on drugs and pharmaceuticals, on the initial consultation with a doctor and on the first 28 days in hospital. Since

contributions are related to income, the contribution revenue is proportional up to the income ceiling on social health insurance contributions, which was Euro 3 140 (ATS 43 200) in 2000. However, the system becomes regressive beyond the income ceiling (*8*).

The contributions to the general health insurance scheme for workers (ASVG) are paid by both employees and employers (roughly half and half). The level of contributions is defined by law taking into account the financial position of social insurance funds.

There is no competition between social health insurers since they are obliged by law to provide benefits and conclude contracts. Hence, they cannot choose their members through risk selection procedures, nor can people choose their social insurer (membership is compulsory and there is no chance of opting out of the scheme). The individual social health insurers are autonomous regarding their administrative procedures. However, there are differences between the various social health insurance funds regarding innovative health management including proactive information procurement on resource consumption and regular documentation of consumption on the part of both patients and contracting parties.

Civil servants

The social health insurance scheme for civil servants is also based on the principle of providing benefits in kind and charges a 20% co-payment for primary medical care services. If a patient's income is very low, he/she may apply for an exemption. Exemption for these co-payments may also be obtained in cases of infectious diseases and in cases of natural disasters.

Farmers

Based on a government decree of 1997, the fee schedules of the regional health insurance funds were extended to apply to workers in the agricultural sector. Since 1 July 1998, those people insured by the social insurance fund for farmers are entitled to medical treatment as a benefit in kind. Accordingly, farmers need no longer pay for medical help in advance and await reimbursement.

Self-employed

Health insurance for the non-professional self-employed is based on the benefit-in-kind principle (up to a specified income level), and provides for a deductible of 20%.

Asylum seekers

Asylum seekers who have been accepted into the federal care system are included in the health insurance scheme provided that they are resident in Austria

and receive no other mandatory health insurance under any other legal provisions. Their contributions, amounting to about Euro 43.97 (ATS 605) per month, are paid entirely by the federal government.

Complementary sources of finance

As can be seen from Table 6, there has been an increase in out-of-pocket expenditure during the observation period of 16 years. The social insurance funds and territorial authorities funded about three quarters of total expenditure on health care in 1985. Their share had fallen to 70% by 1998.

Out-of-pocket expenditure showed above-average growth rates. This may be explained partly by a reduction of the reimbursement share for private doctors in 1996. Whereas before 1996 social insurance funds reimbursed 100% of the standard rate for contract doctors, the reimbursement rate is currently 80% if patients see a private non-contract doctor of their choice. The "out of pocket" category includes expenditures by private households for medication, therapeutic products and a contribution for the cost of the first 28 days of hospitalization. Table 8 shows that out-of-pocket expenses rose by almost 9 percentage points, from 16.3% in 1980 to 25.1% in 1996. Whilst private households tend to spend a great deal on healthcare, their propensity to purchase private (additional) health insurance appears to be low, since the share of private health insurance expenditure declined in all the periods observed since 1985.

Table 8. Sources of finance in percent of overall health care expenditure

Sources	1980	1985	1990	1991	1992	1993	1994	1995	1996
Public									
Territorial authorities	–	18.8	17.8	18.4	18.3	18.5	17.9	17.1	15.7
Social insurance funds	–	49.2	48.3	47.4	46.7	46.7	47.1	47.9	47.9
Private									
Out-of-pocket	16.3	19.6	22.4	22.5	22.7	22.4	22.6	23.7	25.1
Private insurance	7.6	9.8	9.0	9.0	8.9	8.8	8.6	8.6	8.1
Others	–	2.5	2.5	2.7	2.6	2.6	2.6	2.6	2.6

Sources: OECD Health Data 1999.

In order for Austria to join the European Economic and Monetary Union, the government adopted consolidation measures in 1996 and 1997, which were directed mainly at social and health policies. The budgetary discipline that was required is also reflected in Table 6 and Table 8, which show a decline in public expenditure. The analysis of the composition of health expenditure does

not provide any evidence that the Austrian health care system is moving towards greater reliance on tax revenues. Social insurance covers the entire population. Ongoing improvements of services due to medical and technical developments often go hand in hand with the extension or introduction of deductibles and co-payments. This allows state-of-the-art medical care to be covered for the entire population. Over the past 16 years, the burden of funding has gradually shifted towards private households and individuals. Whereas in the early 1990s private households funded slightly over one fifth of health care expenditure, since then their contribution has grown to over one quarter.

Out-of-pocket payments

Health expenditure by private households comes primarily in the form of deductibles, co-payments and cost sharing. They are subject to a large number of exemptions, and in all cases minimum income levels are taken into account.

Primary care sector

The health insurance schemes for civil servants, the self-employed and railway employees generally levy co-payments of 20%.

In 1997, a patient charge of Euro 3.63 (ATS 50) was first introduced for each *Krankenschein* (that is a voucher of insurance which entitles the holder to see a contracted doctor of his/her choice and is valid for three months). Exemptions to this charge are made for children and old-age pensioners, insurees who are subject to another deductible, and persons who suffer from a notifiable disease or who are in need of social protection. The measure had become necessary in view of the growing cost of health insurance. Cost sharing is also practised for various dental and dental prosthetic services and for services provided by private non-contract doctors of the patient's choice (the latter includes doctors, as well as therapists such as psychotherapists, physiotherapists, ergotherapists, logotherapists and other providers who have no contract with the social health insurance funds).

Inpatient sector

For the past decade, hospitalized patients who are subject to the general class of fees have been required to pay an indexed co-payment which is presently Euro 5.09 (ATS 70) per day (on average) for not more than 28 days a year. Again, this provision does not extend to persons already subject to a deductible and persons needing social protection. The co-payment for dependants of the insurees under the general scheme (ASVG) amounts to 10% of the agreed daily rate.

Table 9. Additional funding sources, 2000

	Co-payment	Deductible	Cost sharing
Primary sector	20% for civil servants and non-professional self-employed	ATS 50 for a first consultation in a given quarter, ATS 52 for farmers	Fee for doctor of choice (non-contract doctors), reimbursed 80% of the fee paid to contract doctors
Inpatient sector	20% for self-employed in trade, commerce and industry 10% for co-insured	ATS 70 per day up to 28 days of hospital stay	–
Drugs	–	Prescription charge (ATS 55 per package)[a]	–
Rehabilitation	–	ATS 78 per day	–
Spas	–	ATS 78 to 198 per day	–
Therapeutic products	10%–20% (min. limit ATS 281)	–	

Source: Sozialversicherung aktuell, Federation of Austrian Social Security Institutions, no. 130/1999, December 1999.

[a] as of October 2000; for the first three quarters of 2000, the prescription charge was ATS 45.

In 1996, a general contribution for spas and rehabilitation courses was introduced. In 1999, a co-payment amounting to Euro 5.67–14.39 (ATS 78–198) was levied for stays at spas and Euro 5.67 (ATS 78) for rehabilitation care. People whose income does not exceed a specified level are exempt from these co-payments.

Drugs and therapeutic products

A prescription charge of Euro 3.45 (ATS 55, in 2000) is due for each pack of drugs prescribed and for which the cost is to be covered by the social health insurance funds. People in need of social protection and persons whose income does not exceed a specified level are exempt from the charge For therapeutic products, users have to contribute 10–20% of its price depending on the insurance fund, but this amount will be at least Euro 20.42 (ATS 281).

Voluntary private health insurance

In view of the high proportion of Austrians who enjoy social health insurance coverage, the main reason for people taking out supplementary private health insurance is to cover the costs of superior ("special-class") accommodation in hospital, obtaining treatment by a doctor of their own choice and reducing the waiting times for tests and therapeutic services. Private (supplementary) health insurance is offered by private for-profit insurance companies.

Private health insurance as a rule covers the treatment of diseases which occur during the period of the insurance contract. At the commencement of the contract, there is a waiting period (in contrast to statutory health insurance), during which treatment of accidents and specified infectious diseases are excluded from coverage.

Hospital cost insurance covers the accommodation costs of a stay in hospital, the costs of treatment and of in-kind services at the hospital. This type of health insurance is typically taken out mainly as a "gap-filler" to supplement social health insurance (as it covers the additional costs of superior accommodation at the hospital). This type of insurance is also offered as "group insurance", i.e. purchased by an employer on behalf of a group of employees.

Hospital per-diem insurance (fixed sum insurance) pays a defined amount for each day of hospitalization, without requiring the insuree to provide evidence of actual costs.

One in three Austrians is covered by private (supplementary) health insurance. In 1997, about 13% had taken out hospital cost insurance, and about 21% had some other private insurance, for example hospital per-diem insurance, insurance for outpatient treatment and dental insurance. The distribution of private insurance varies between states: 17% of the population in Burgenland to 54% in Carinthia. About half of those who have private supplementary insurance coverage are self-employed while 40% are civil servants or salaried employees (*9*). Numbers of people with private supplementary health insurance rose in the 1980s, but has been falling since the early 1990s. Altogether, a decline of 8% occurred between 1980 and 1999 (*10*). As a rule, private insurance policies are taken out by individuals.

Insurance for outpatient medical treatment, which covers both appointments at doctors' surgeries and home visits, as well as the costs of drugs, therapeutic products, etc., is also offered by private health insurance companies. Special insurance products that cover the costs of complementary medicine are gaining ground.

External financing

At the federal level, university teaching hospitals receive a lump sum every year (for "additional expenditure on teaching hospitals" see Table 25) to cover additional spending arising from university research and teaching. Both research and teaching are within the federal government's area of responsibility. University teaching hospitals are also permitted to obtain third-party funds by accepting research contracts.

Health care benefits and rationing

Social health insurance covers the following benefits:

- medical services in the primary sector, including physiotherapeutic, ergotherapeutic and logotherapeutic treatment, as well as psychotherapy
- drugs, therapeutic products, medical aids
- dental treatment, dentures
- hospital care
- medical home care
- sickness benefits
- maternity benefits
- medical rehabilitation
- health protection and disease prevention (spas)
- early detection of disease and health promotion
- travel expenses and transport costs.

As a rule, benefits which qualify as social health insurance benefits can be obtained without limits and regardless of personal income. Benefits, which are not (or not yet) included in the obligatory health insurance coverage must be applied for and approved by the "head doctor" (employed by the health insurance fund). In order for any benefit to be included as an obligatory health insurance benefit, the professional associations must negotiate in detail access to and regional distribution of service providers, the reimbursement rates and the observance of quality standards. This process occasionally may take longer than what is deemed convenient for the parties and patients involved, but is a necessary prerequisite to ensure balanced supply (horizontal equity), uniform fees and observance of quality criteria.

Patient rights

The legal code has already made provision for patient rights, but there are still information deficits and implementation problems to overcome, due to the numerous rules and regulations which exist at federal and state levels. Patient rights are closely connected to hospitals, since it is there that the most problematic cases of medical liability will occur. Considering that patient rights cross boundaries consideration is being given to drawing up a statutory agreement under Article 15a of the Austrian Constitution between the federal

and state governments in which they would undertake to guarantee the specified patient rights within the scope of their respective responsibility. The objective is to develop a complete and clear summary of all patient rights (a "patient's charter") without regard to areas of responsibility, and which includes the following aspects:[11]

- right to treatment and care
- right to respect, dignity and integrity
- right to self-determination and information
- right to documentation
- special provisions for children
- representation of patients' interests
- enforcement of claims for loss or damage.

So far, this charter has been signed between the federal government and one Land, whilst a treaty with another Land is in its final stages. All other Länder have since made legal provision to allow the establishment of a patient ombudsperson's office. A patient ombudsperson does not take instructions from the government; but is obliged to investigate complaints and has duties with regard to information and advice. In addition to the independent patient ombudsperson, there is an arbitration office for general-medical and dental cases in each Länder which is organized by the state doctors' association and which is also used to enforce patient rights.

Health care expenditure

Table 10 illustrates the growth of health care expenditure, as calculated by ÖSTAT (Austrian Central Statistical Office) and reported to OECD. Between 1970 and 1998, nominal expenditure on health rose at a rate of 9% annually. At constant 1995 prices, total health expenditure grew by an average of 2.3% per year in real terms. Health care expenditure as a share of GDP increased by three percentage points, from 5.3% of GDP in 1970 to 8.3% of GDP in 1998.

Following a period of continuous growth, three quarters of health care expenditure was paid from public revenue in 1994. By 1998 that amount had declined to 70.6%.

[11] As set out in 1824 of the annexes to the stenographic records of the National Council, XXth legislative period, 8 June 1999. Hitherto this agreement has only been agreed between the federal government and one state.

Table 10. Health care expenditure in Austria, 1970–1998

	1970	1975	1980	1985	1990	1995	1996	1997	1998[a]
Total health care expenditure at current prices, in ATS million	20.5	48.1	78.4	91.6	130.6	185.9	194.0	207.7	216.2
Total health care expenditure as a percent of GDP	5.3	7.2	7.7	6.7	7.2	8.0	8.0	8.3	8.3
Public expenditure as a percent of total health care expenditure	63.0	69.6	68.8	76.1	73.5	73.9	73.5	73.0	70.6

Source: OECD Health Data 1999.

[a] Expenditure for 1998 as per ESA 95, for 1970–1997 as per ESA 79, see also Table 6 for explanatory notes.

Table 11 shows the nominal and real growth rates for the main areas of expenditure in health care and, for reference purposes, growth of GDP and of total government expenditure.[12] Between 1981 and 1997, the health care sector grew at a faster pace, in nominal as well as real terms, than overall growth in the public sector, and was one percentage point higher than economic growth. Between 1982 and 1989, real expenditure from private sources of revenue showed the fastest growth. Between 1990 and 1997, the growth rate for health care expenditure was double that of the economy in general, and was about one percentage point above the overall growth of the public sector (*11*).

Table 11. Health care expenditure growth rates, at current prices and at 1990 prices, in percent

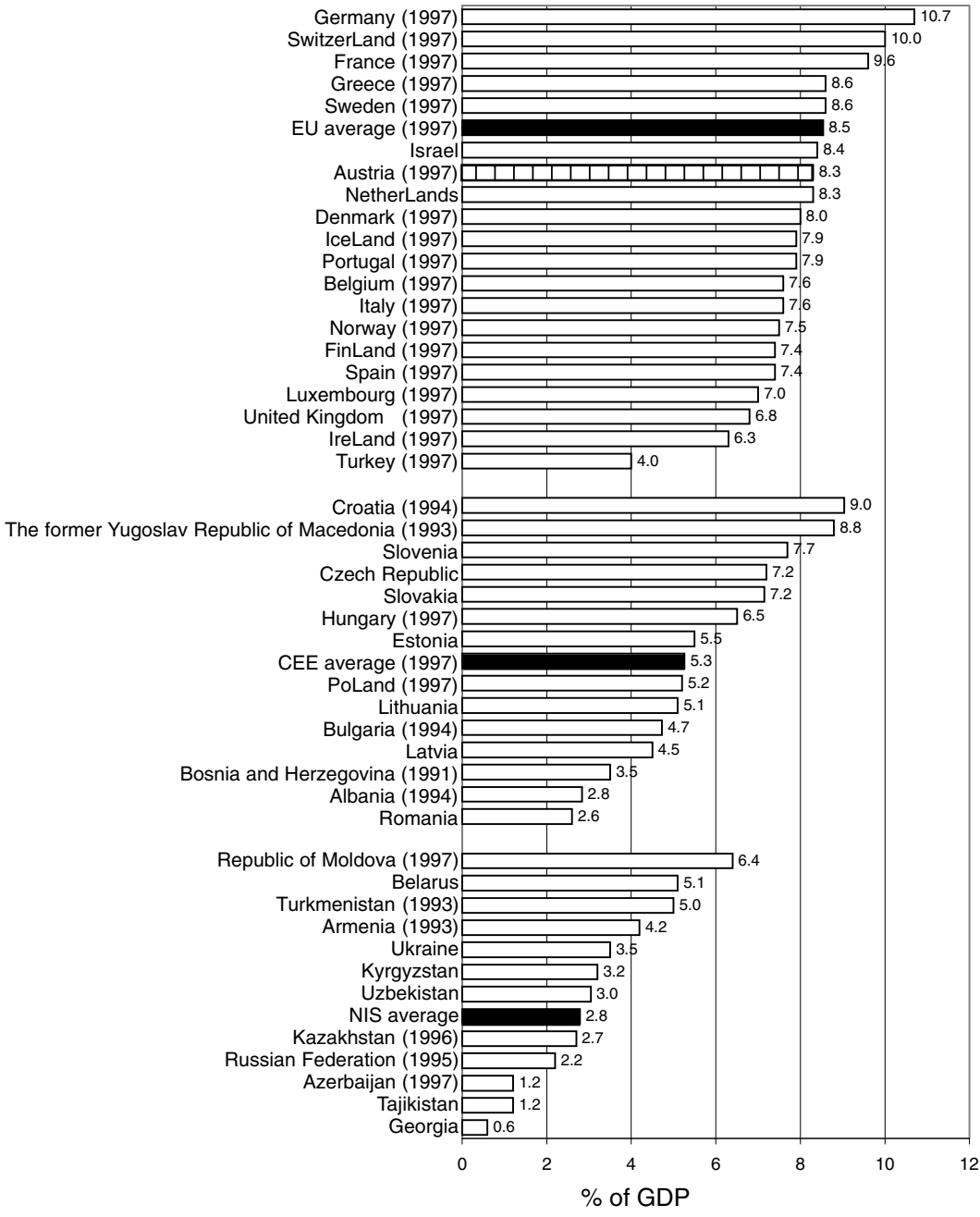
	1981–1997		1982–1989		1990–1997	
	nominal	real	nominal	real	nominal	real
Total health care expenditure	6.7	3.6	6.7	3.6	6.9	4.0
Public	6.4	3.3	6.3	3.3	6.7	3.9
Private	8.0	3.8	8.4	4.6	7.7	3.4
GDP	5.4	2.3	5.4	2.4	4.8	2.0
Total public expenditure	5.9	2.8	5.5	2.5	5.7	2.8

Sources: Austrian Central Statistical Office 1998, OECD Health Data 1999, IHS HealthEcon 2000.

Health care expenditure as a share of GDP was 8.3% in 1997 (see Fig. 3). Using the unweighted EU average, the GDP share spent on health was 8.5%. As such, Austria's level of expenditure on health was lower than that in France, Germany, Greece, Sweden and Switzerland which spent over 8.4% of GDP on health in 1997. The level of expenditure and the relative ranking of a country do not, however, reflect automatically the relative efficiency of the health care

[12] In order to obtain comparisons by periods, two periods were formed: 1982–1989, and 1990–1997.

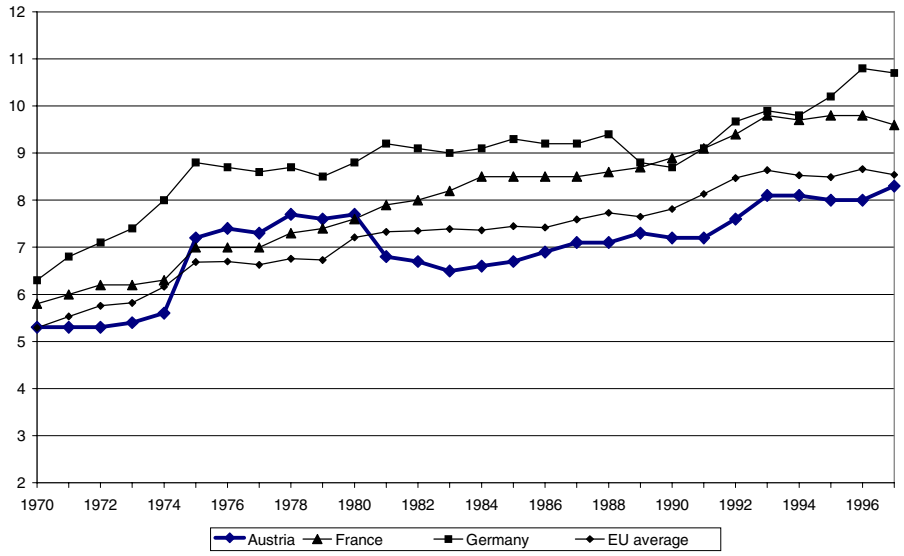
Fig. 3. Total expenditure on health as a % of GDP in the WHO European Region, 1998 (or latest year)



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

systems. It is only when production and output (results) over time are considered as well that qualitative comments can be made about the efficiency of a given health care sector.

Fig. 4. Health care expenditure as a percentage of GDP in Austria and selected countries, 1970–1997

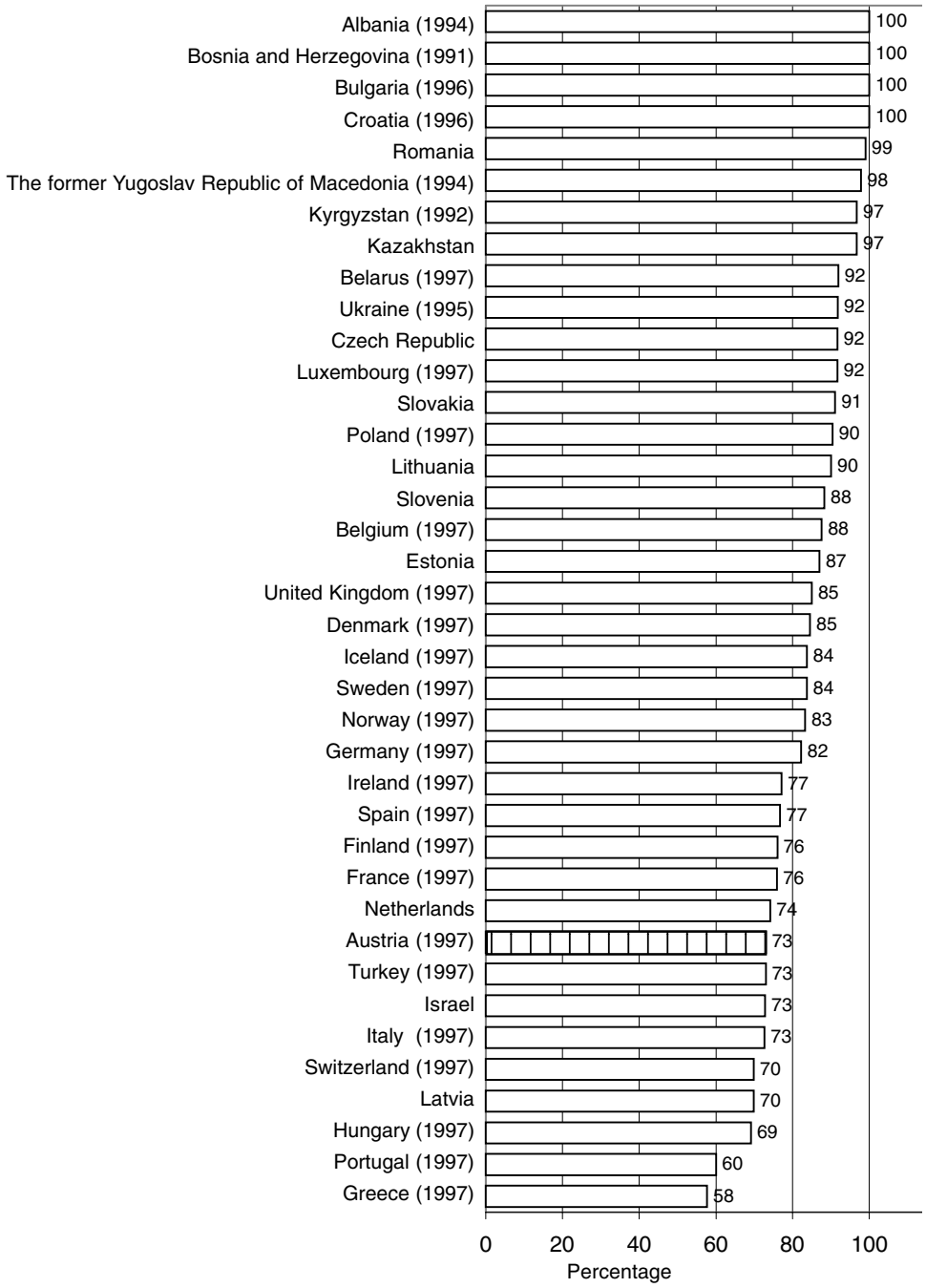


Source: WHO Regional Office for Europe health for all database.

In a country-based comparison, Austria, with 73% of total health care expenditure funded from public revenue sources, ranks among the lower third of the European Region as defined by WHO (see Fig. 5). In Greece, Hungary, Israel, Italy, Latvia, Portugal, Switzerland and Turkey, private revenue sources are even more significant than in Austria. Between 1980 and 1997, the share of public expenditure, (as a percentage of total expenditure on health) generally, declined within the EU, with the exception of Greece, Belgium and Austria. However, it should be noted, that the starting level in 1980 in Austria was the lowest in relative terms, whereas public expenditure on health in Belgium was more than 80% of total health care expenditure (*12*).

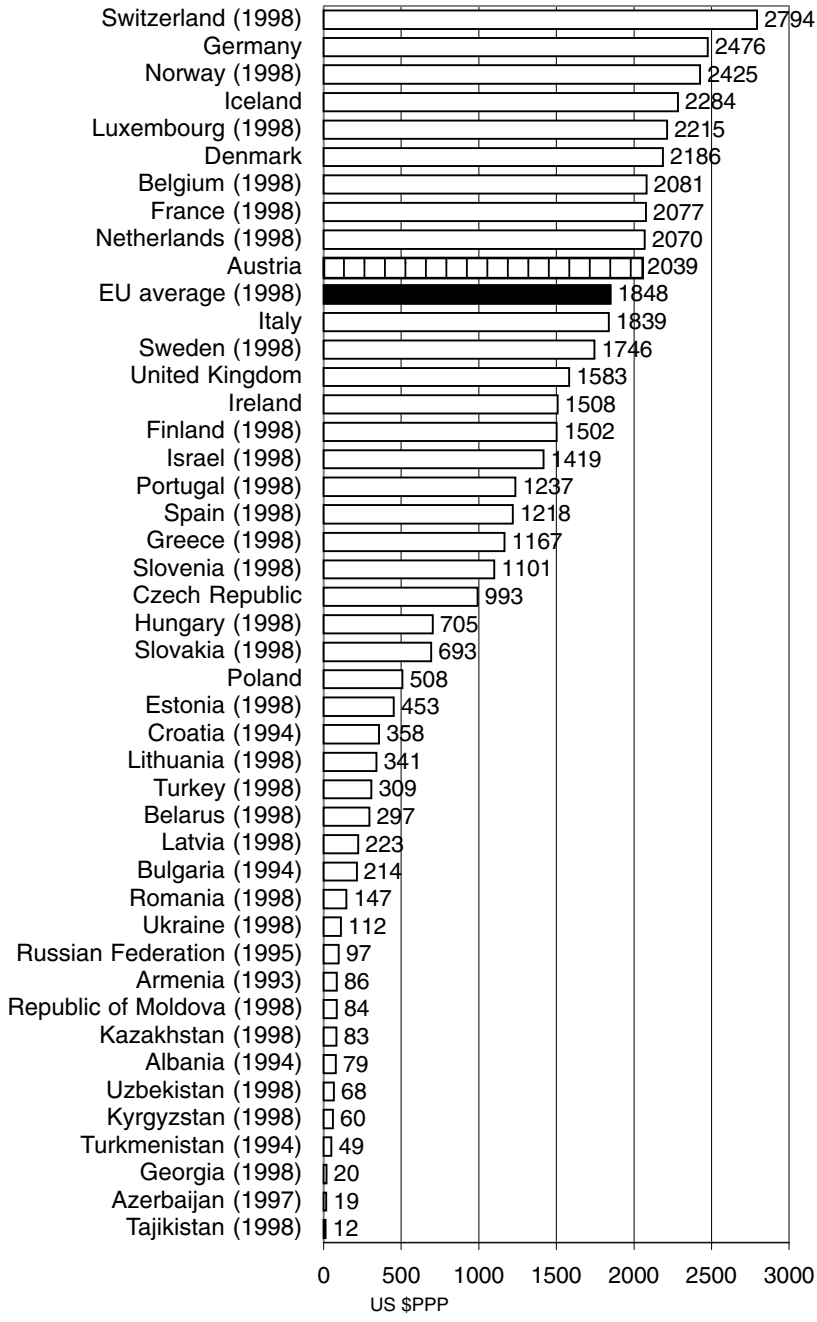
In Austria, per capita expenditure on health in 1997 was 9% above the EU average (US $1771 in PPP (purchasing power parity) (see Fig. 6). Compared to 1990, it rose by 3% relative to the EU average. Whereas in 1990, per capita expenditure in Germany was 12% above the EU average, the gap has since grown to 26%, placing Germany 42% above the population-weighted EU

Fig. 5. Health expenditure from public sources as % of total health expenditure in the WHO European Region, 1998 (or latest available year)



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

Fig. 6. Health care expenditure in US $PPP per capita in the WHO European Region, 1999 (or latest available year)



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

average. Switzerland was 55% over the EU average, followed by Luxembourg and Germany. Per capita health care expenditure is usually closely linked to per capita income. In general it can be said that the richer a country is, the more its population spends on health care. In 1997, about 80% of the level of per capita health care expenditure in selected European countries (EU-15, Poland, Czech Republic, Slovenia, Hungary) could be explained by per capita income (*13*). Once a given income level is exceeded, per capita expenditure on health care tends to rise faster than per capita income.

Use of funds in health care

Table 12 shows a functional breakdown of health care expenditure. The inpatient sector takes up the largest share, which was 43% in 1997. Expenditure on outpatient services rose by about three percentage points between 1970 and 1997, from 23.9% to 26.2%. Expenditure on drugs increased from 10.9% to 15.1% in the period 1980–1997; expenditure on therapeutic products and medical aids went up from 2.3% to 2.7%. Investment as a percentage of total health care expenditure declined by 1.8 percentage points between 1980 and 1997, from 4.9% to 3.1%.

Table 12. Structure of health care expenditure, as a percentage of total health care expenditure, 1970–1997

	1970	1975	1980	1985	1990	1995	1996	1997
Inpatient sector (%)	–	–	46.6	47.0	48.1	41.4[a]	40.6[a]	43.0[a]
Outpatient sector (%)[b]	23.9	20.0	19.3	22.5	24.0	25.1	25.6	26.2
Drugs (%)	16.2	12.9	10.9	12.3	13.2	14.1	14.0	15.1
Therapeutic products and medical aids (%)	–	–	2.3	2.9	3.1	2.8	2.7	2.7
Public investment (%)	5.5	5.6	4.9	5.8	5.1	3.6	3.7	3.1

Sources: OECD Health Data 1999, IHS HealthEcon 2000.

[a] BMSG: Expenditure on fund hospitals, health data as per ESA 95.

[b] Includes expenditure on practitioners, dental treatment, medical services not rendered by doctors and expenditure at the hospital outpatient departments as per the OECD definition.

This spending pattern can be found in almost all industrialized countries. Thus cost containment measures to curb expenditure growth rates were and are often quite similar. Efforts to contain costs are therefore concentrated on the inpatient sector and on drugs expenditure.

Health care delivery system

Primary health care

Primary health care provision in Austria is characterized by independent, self-employed physicians who typically work on their own.[13] In addition, patients have direct access to outpatient clinics run by the social health insurance funds or by private entities. Furthermore, outpatient departments at hospitals are available, although to a limited extent. In terms of organizational structure, primary health care provision is based mostly on contracts between "individual enterprises" and the health insurance funds. Nevertheless, the increasing importance of hospital outpatient departments is creating a distinct mix of private and public production in primary and ambulatory care.

Self-employed doctors

Coverage by physicians doubled between 1955 and 1998. Whereas in 1955 there was one doctor for every 533 people, the ratio had improved to 1:239 by 1998. The doctor-to-population ratio varies greatly – the ratio in urban areas (1:145) is double that in rural areas (1:350).

In 1998, Austria had 33 734 doctors and dentists, about half of whom were self-employed. Of these, 75% had entered into a contract with one or more health insurance funds. These contract doctors are usually the first contact point in the health care system. A so-called location plan developed by health insurance funds and the doctors' associations defines the number and regional distribution of self-employed doctors. The purpose of this plan is to avoid regional and local imbalances in the distribution and access to doctors. In 1998, a contract doctor working as a general practitioner covered on average 2000 people. In the lowest-density regions, the ratio was 2254 per doctor, and in the

[13] Other types of services by doctors are organized as groups jointly owning equipment, jointly run surgeries and day clinics. The legal foundations for group practices have not yet been established although trials have been carried out with internists and radiologists.

highest-density regions 1940 per doctor. A similar pattern in the distribution of specialists can be identified. Patients are free to select a contract doctor of their choice irrespective of geographical considerations.

Those with insurance under the general scheme (ASVG) (81% of all insured persons) obtain a voucher upon request from their employers, which entitles them to benefits (health insurance voucher). Each person is entitled to one voucher for a general practitioner and one voucher for a specialist in each accounting period, which is usually three months. During any one accounting period, the patient may only change their doctor with the consent of the health insurance fund. If a patient consults a contract doctor, s/he must present evidence of his/her entitlement by showing a health insurance voucher.

One in four self-employed doctors do not have a contract with a health insurance fund. A patient who consults a non-contracted doctor does not need to present a health insurance voucher, but will be refunded only four fifths of the fee which would be paid by the health insurance fund to a contract doctor. Fees for contract doctors are usually much less than those charged by private (non-contracted) doctors.

Table 13. Parameters of primary health care provision and referral rates (1970=100)

	Insured in non-profit health care funds	Primary health care provision[a]	Cases per contract doctor	Inpatient treatment[b]	Referral rate[c]
1970	100	100	5.18	100	3.9
1975	105.2	108.2	5.33	114.6	4.2
1980	109.7	114.1	5.39	132.5	4.6
1985	110.8	117.6	5.50	152.1	5.1
1990	116.4	131.9	5.87	166.4	5.0
1995	123.4	149.3	6.27	190.3	5.1
1996	123.9	150.4	6.29	194.3	5.1
1997	124.5	149.0	6.20	201.1	5.4

Source: Gesundheitswesen in Österreich – edition of summer 1999.

[a] Average consultation per insured person, multiplied by the number of insured persons

[b] Cases of inpatient treatment of persons carrying health insurance

[b] Inpatient treatment as a percentage of primary health care cases.

General practitioners to some extent act as "gatekeepers", since they can control patient flows through their referral policies. This is the case when several specialists need to be consulted in a single accounting period and/or hospital stays or treatment at outpatient departments are required.

The number of self-employed doctors grew by 50% between 1980 and 1995, whereas the growth rate for salaried doctors was 137%, almost three times as much. This trend reflects the fact that health care in Austria is highly hospital-

focused. But it may also reflect increasing specialization due to technical progress in medicine.

Table 13 provides information on primary and secondary health care provision. In the course of 27 years, the number of insured persons rose by 24.5%, the case load in the primary sector by 49% and in the inpatient sector by 101%. Frequency of contact with doctors increased by one percentage point over the period of observation. The referral rate, obtained from the number of hospital admissions as a proportion of all primary care contacts, rose to 5.4, i.e. it was 1.5 percentage points higher than in 1970. The referral rate has remained more or less constant since 1985, whereas the number of hospital admissions has shown a substantial and – comparably – disproportionate increase. At 6.5 cases per physician and year, Austria ranked near the EU average of 6.1 in 1998 (see Fig. 7).

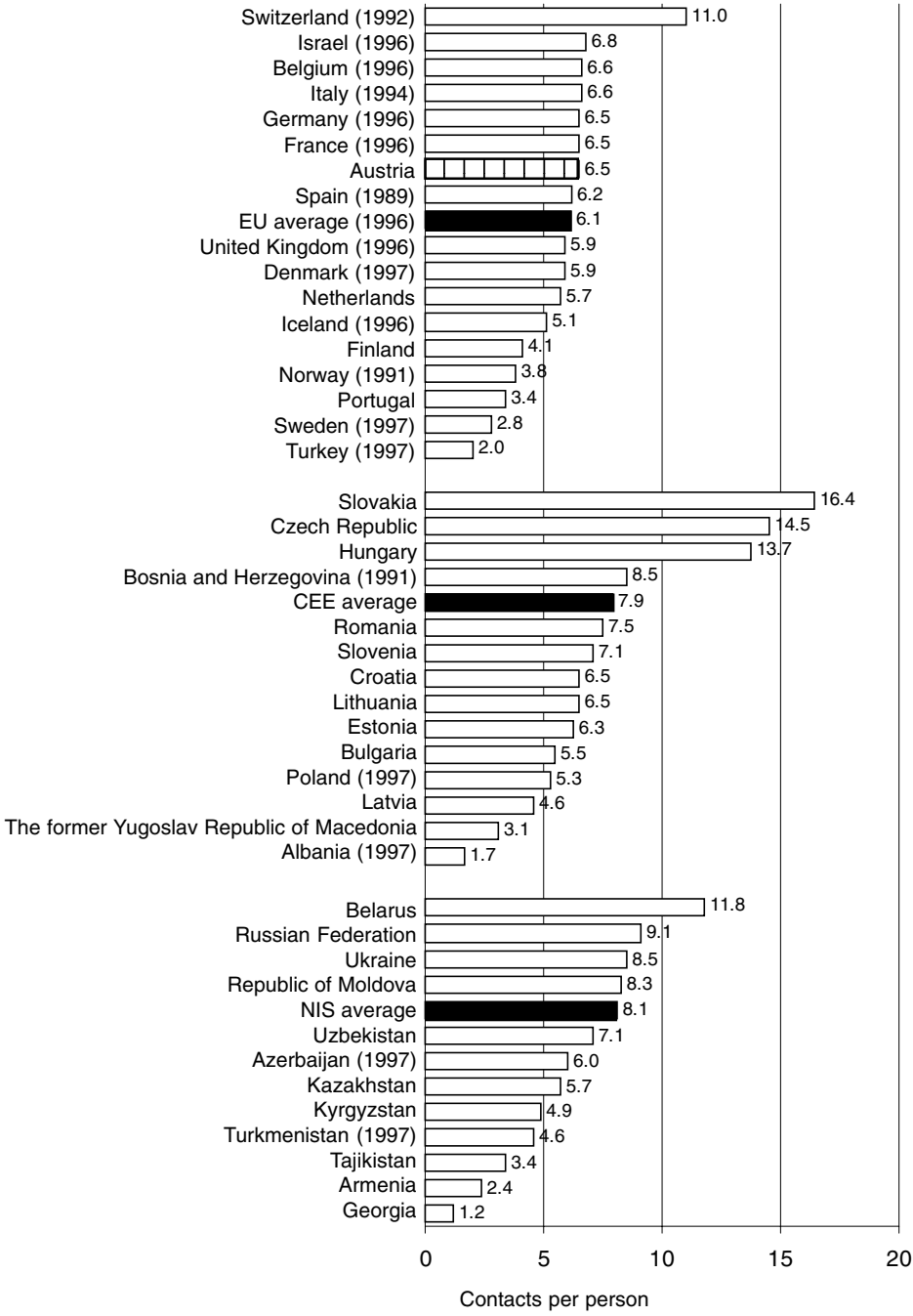
Dental services

One in five self-employed specialists are dentists. In 1998, one dentist was available for every 2111 people, although the ratio varied greatly between Länder. The ratio is highest in Vienna and lowest in Burgenland, the easternmost state. As a rule, dental work is a benefit in kind provided by social health insurance (7% of the total health insurance budget in 1998 was spent on dental work and dentures). Fixed dentures are only paid for in exceptional cases by social health insurance funds. Normally, patients have to cover the costs of such services themselves. Since 1999, fixed dentures can be obtained at dental clinics operated by health insurance funds, but patients are still required to pay out-of-pocket.

Self-employed health professionals

This group includes midwives, physiotherapists, those with advanced training in health and nursing care, dieticians, ergotherapists, speech therapists, audiologists, psychotherapists, clinical psychologists and health psychologists. Table 14 illustrates the trend in the number of active midwives. Up to 1985, the total number of midwives was in decline, down to 20% below the number in 1970. A steady increase occurred only after 1990. Compared to 1970, 16% more midwives were active in 1998. There was also a clear shift in the way midwives were practising: in 1970, more than half were either publicly appointed or self-employed; by 1995 this number had fallen to 19%. At the same time, the numbers of midwives practising in hospital had risen substantially, reflecting a decline in home births. In 1998, some 10% of active

Fig. 7. Outpatient contacts per person in the WHO European Region, 1998 (or latest available year)



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

Austria

midwives were self-employed, 30% were both self-employed and working in hospitals, and almost 60% were employed solely in hospitals. The number of midwives in hospitals grew by 35% between 1990 and 1995.

Compared to 1970, 10% more midwives were available per 100 000 women in 1998. When applied to the total population the number of midwives grew by 7%. Although numbers have been increasing since 1985, the number of midwives per 100 000 women of reproductive age (15–45) was still below the 1970 level.

Table 14. Active midwives, 1970–1998, (1970=100)

	1970	1980	1985	1990	1995	1997	1998
Midwives, total	1 322	1 100	1 059	1 090	1 443	1 498	1 534
	100	83	80	82	109	113	116
Self-employed midwives	308	134	123	163	275[a]	334[a]	435
	100	44	40	53	89	108	141
Hospital midwives	579	770	827	865	1168	1025	948
	100	133	143	149	202	177	164
Publicly appointed midwives	435	196	109	62	–	–	–
	100	45	25	14	–	–	–
Solely self-employed midwives	–	–	–	–	–	139	151
Midwives							
Per 100 000 persons	17.7	14.6	14.0	14.1	17.9	18.6	19.0
	100	82	79	80	101	105	107
Per 100 000 women	33.5	27.8	26.6	27.1	34.8	36.1	36.9
	100	83	79	81	104	108	110
Per 100 000 women aged 15–45	92.2	68.2	62.7	63.8	82.3	85.3	87.4
	100	74	68	69	89	92	9
Gynaecologists and obstetricians							
Per 100 000 persons	6.2	8.0	9.2	10.7	12.6	13.9	14.6
	100	128	148	171	201	222	235
Per 100 000 women	11.8	15.3	17.6	20.4	24.4	27.0	28.3
	100	130	149	173	207	229	240
Per 100 000 women aged 15–45	32.5	37.4	41.5	48.2	57.6	63.8	67.0
	100	115	128	148	177	196	206

Sources: Gesundheitswesen für Österreich – edition of summer 1999, IHS HealthEcon 2000
[a] Self-employed midwives and hospital midwives

The situation is different for gynaecologists and obstetricians. Between 1970 and 1998, the number of specialists per 100 000 people had more than doubled. In 1998, 87 midwives and 67 gynaecologists were available per 100 000 women of reproductive age. The growth in the number of gynaecologists during the

period of observation was double that of the number of midwives, and in 1998 was 100% above the 1970 level. During this period, the female population grew more rapidly than the overall population, even though the growth rate was markedly lower in the 15–45 age group than across all age groups.

On the one hand, these developments reflect growing specialization and, on the other, indicate the complementary nature of health care system inputs in general. The rapid growth in the number of gynaecologists points to increasing technology driven specialization. The growth in the number of midwives from the 1980s, and similar growth rates since the 1990s provides evidence that inputs are complementary, i.e. that technology-driven specialization does not replace the obstetric services of midwives. It can be assumed that the interaction between such developments at all levels of medical care has a strong impact on expenditure dynamics in the health care system.

Provision of medical home nursing (which is a benefit in kind provided by social health insurance) cost about 0.1% of total health insurance funds' expenditure in 1998. The amount has fallen by 2.7% since 1997. There are no territory-wide reporting standards to document the number of employees or nursing staff in the primary care sector. The relevant data are reported by the welfare organizations, which are major providers of ambulatory nursing care, to the state governments which act as record keepers.

Psychotherapy services

In 1999, there were 5193 professionally qualified people included in the list of psychotherapists kept by the Federal Ministry for Social Security and Generations. Of these, 2416 were free-lance, 1923 worked both as free-lancers and were employed, and 1173 did no freelance work but were employed. This means that there has been an increase in the number of people entitled to practise as psychotherapists of 52% compared with 1993 levels, and of almost 450% compared to 1991. Psychotherapy coverage in the primary care sector is considered to be inadequate and particularly imbalanced in spite of the expected growth in the numbers of people obtaining qualifications (*14*). Services are concentrated primarily in urban areas, and there are fewer in the eastern regions (with the exception of Vienna). In 1996, there were 12 hourly sessions for every 10 000 people aged 5–69 years available in Burgenland, whereas in Salzburg, the figure was twelve times higher and seventeen times higher in Vienna, (although it should be noted that Vienna provides services to neighbouring states as well).

Diagnostic services by clinical psychologists have been a benefit in kind covered by the insurance funds since 1995. In 1999, 2548 people worked as

clinical psychologists, slightly less than half of them were employed. Compared to 1991, more than seven times as many clinical psychologists were active in 1999. About half the vacancies on the location plan have been filled. Here again, regional disparities between urban and rural areas can be found.

Independent outpatient clinics

The activities of independent outpatient clinics are regulated in the Federal Hospitals Act. Independent clinics are basically hospital institutions, but their services are important for primary health care delivery. In general, their responsibilities are similar to those of self-employed doctors. They examine and treat people who do not need hospital treatment. In order to operate, an independent clinic requires a licence from the relevant state government.

In 1997, there were 724 independent clinics, of which 139 (19.2%) were operated by a social health insurance fund. Health insurance funds concentrate on operating dental clinics: 97.8% of dental clinics operating in 1997 were run by a health insurance fund. Health insurance funds also operate X-ray clinics, physiotherapeutic clinics, gynaecology clinics, etc. The number of both general and dental clinics owned by the social insurance funds has been reduced by half since 1975. This decline is due to efforts by the social security funds to shut down small, unprofitable clinics and concentrate on larger units.

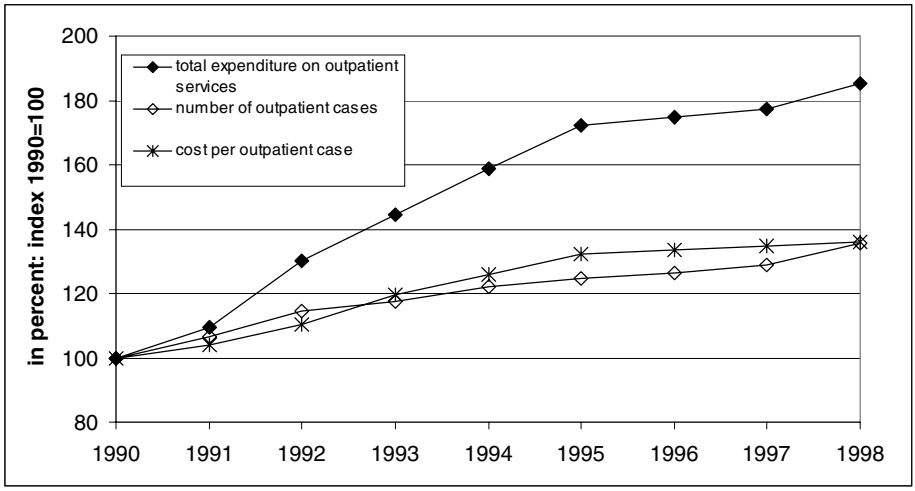
The supply of general practitioners and specialists, combined with the excellent equipment available at clinics, frequently makes for considerable competition between self-employed doctors. In the late 1970s, the Constitutional Court, in the so-called "independent clinic dispute", concluded that the licensing of any independent clinic required prior agreement between the doctors' associations and the Federation of Austrian Social Security Institutions. If no agreement is reached, the state government will assess whether a clinic is needed.

Hospital outpatient departments

Hospital outpatient departments provide an important interface within the Austrian health care system. Patients can utilize them directly by showing a health insurance voucher. Some 1500 outpatient departments are available for emergency and acute care, as well as for post-treatment and preventive care, some of them around-the-clock. This area of outpatient care has grown in recent years.

In 1998, outpatient departments of public hospitals saw about 5 million cases, an increase of more than 35% over 1990. Between 1997 and 1998, the case load jumped by 5.1%, more than double the growth of previous years.

Fig. 8. Services at the hospital outpatient departments, 1990–1998



Sources: BMSG – 2000, IHS HealthEcon 2000.

Growth in the per-case expenditure matched case-load growth. By 1998 expenditure was 36% higher than in 1990. Since 1993, the annual cost growth rate per outpatient case has been falling constantly. Over the past three years, the annual change was about 1% (see Fig. 8).

Currently, it is rather difficult to trace patients through the Austrian health care system. The health-policy objective of greater continuity of care between outpatient, inpatient and intermediate services has been identified as a priority issue in several government agreements, including the government policy statement of February 2000.[14] The data required for this purpose must be collected in cooperation with the social security funds that contract with the self-employed general practitioners and specialists, and the state commissions or the Structural Commission which monitor services at hospital outpatient departments. It is only when these data are consistently available that it will be possible to offer incentives for integrating the supply of services.

[14] It was agreed to introduce outpatient fees in order to contain the rising demand for hospital outpatient department services. For referrals to the outpatient department, Euro 10.9 (ATS 150) per insured event is charged as of January 2001; direct contact costs Euro 18 (ATS 250, up to ATS 1000 per calendar year).

Public health services

Preventative medical services provided by the Austrian public health system cover the whole life cycle, from the maternal and child health programme to medical examination programmes for schoolchildren, and general health check-ups for adults (over 19 years of age). The purpose of such preventative services is to strengthen health and improve early diagnosis of diseases. The work of the public health service is closely linked to a range of preventative services. Some services, such as the health check-ups for young people (15–19 years old) and adults (over 19 years of age) are compulsory benefits covered by the social health insurance funds.

The public health system is directly and indirectly managed at the federal level (see the section on *Organizational structure and management*). Within this system, the public health service is charged with responsibility for health, including relevant examinations (*15*). The public health service has a decentralized structure; most responsibilities are handled by the district and state authorities on behalf of the federal level (indirect federal administration). Their work is documented in state public hygiene reports.

Public health service activities are performed mainly by appointed medical officers. It is the responsibility of medical officers to undertake all measures that serve the health of the population in general. Most medical officers are employed by the district government authorities, municipalities and state government authorities. In 1993, 273 medical officers were employed throughout Austria. Their number rose by 29 in 1996. About 1% of all doctors work as medical officers in the public health service. On average, there is one medical officer per 30 000 to 60 000 people. The public health service has access to six federal institutions which undertake tests and investigations to combat contagious diseases, check the quality of drinking water, check the hygienic conditions at hospitals and provide pre- and postnatal preventive care.

Maternal and child health programme

A programme to improve maternal and child health was introduced in the early 1970s (specifically the mother-child passport). Since then, together with improvements in living standards, there has been a continuous decline in infant mortality rates. It dropped by four fifths between 1975 and 1997, from about 20 deaths per 1000 live births in 1975 to 4.9 in 1998. As such, Austria ranks below the EU average (5.55 in 1996). Similarly, maternal mortality rates have been reduced greatly, from 8.7 in 1960 to 0.5 per 10 000 live births in 1998. Up to the mid-1990s, financial incentives (Euro 1090 in several instalments) were

offered to pregnant women to have preventive check-ups included in the "mother-child passport". These funds were cut in 1996, as part of the consolidation pact, and instead means-tested bonus payments were introduced

The programme provides for five check-ups for pregnant women, including two laboratory tests, an examination by an internist, plus five examinations of the infant during the first year of life, including an orthopaedic, ear-nose-throat (ENT) and eye test. An extension of the maternal and child health service is under discussion. Check-ups proposed for inclusion in the mother-child passport have been under evaluation by the Supreme Health Board since 1993.

Medical check-ups at school

The medical school officer is responsible not only for checking hygiene conditions at schools, but also for regular examinations of pupils and students for their medical fitness; specifically sight, hearing and physical fitness.

Table 15. Preventive care

	Youth check-ups		Health check-ups	
	total	% of 15–19 year olds	total	% of population over 19 years of age
1980	200 907	67.5	119 380	2.2
1985	187 647	71.9	91 140	1.6
1990	139 001	67.4	347 345	5.9
1994	95 154	60.4	490 302	8.0
1995	91 272	60.9	503 483	8.2
1996	82 391	55.2	522 248	8.9
1997	82 111	55.9	584 401	9.4
1998	86 074	58.9	622 159	10.0
Average growth rate, %	-4.60		9.61	

Source: Gesundheitswesen in Österreich, edition of summer 1999, IHS HealthEcon 2000.

Health check-ups

Since the early 1970s, preventive health check-ups have been offered and paid for by the social health insurance funds. Every person over the age of 19 years can obtain a health check-up once a year. For women, a gynaecological examination is offered as well. Preventive health check-ups act as screening measures to diagnose specified risk conditions as early as possible. In some states, people are actively invited to undertake such check-ups, but demand varies regionally since it depends on the doctor-to-population ratio and health fund activities. During the 1990s, take-up of preventive check-ups rose by 68%. While the number of basic check-ups was growing, gynaecological examinations

remained stable. Between 1980 and 1998, the average annual increase in the number of check-ups was almost 10%, with women using the service more frequently than men.

Similarly, there are check-ups for young people offered to those under 19 years of age. When a young person enters employment, s/he is invited to have a health check-up and their employer is obliged to give them leave at full pay. Demand for this service declined steadily, falling by an average of 4.6% during the years 1980 and 1998. In 1998, 58% of young people aged 15–19 used the service. The problems found most frequently were impairment of posture and gum disease. When a serious impairment is found, the Labour Inspectorate is notified.

A critical responsibility within the scope of health promotion and prevention of contagious diseases is vaccination (see Fig. 9). Since 1998, all childhood vaccinations generally recommended by the Supreme Health Board have been offered free of charge. Currently, infants are given shots against diphtheria, tetanus, whooping cough, measles, mumps, rubella, haemophilus, hepatitis B and poliomyelitis (if given as combined vaccine). Vaccinations are financed jointly by the federal (2/3) and state (1/6) governments and the social health insurance funds (1/6). Procurement and administration are handled by the health insurance funds; doctor's fees, if any, are paid by the Länder. For 2000, vaccination costs were expected to run to Euro 9.8 million (ATS 135 million). Records of vaccinations given within the scope of the vaccination programme are documented at Länder level in accordance with a uniform scheme.

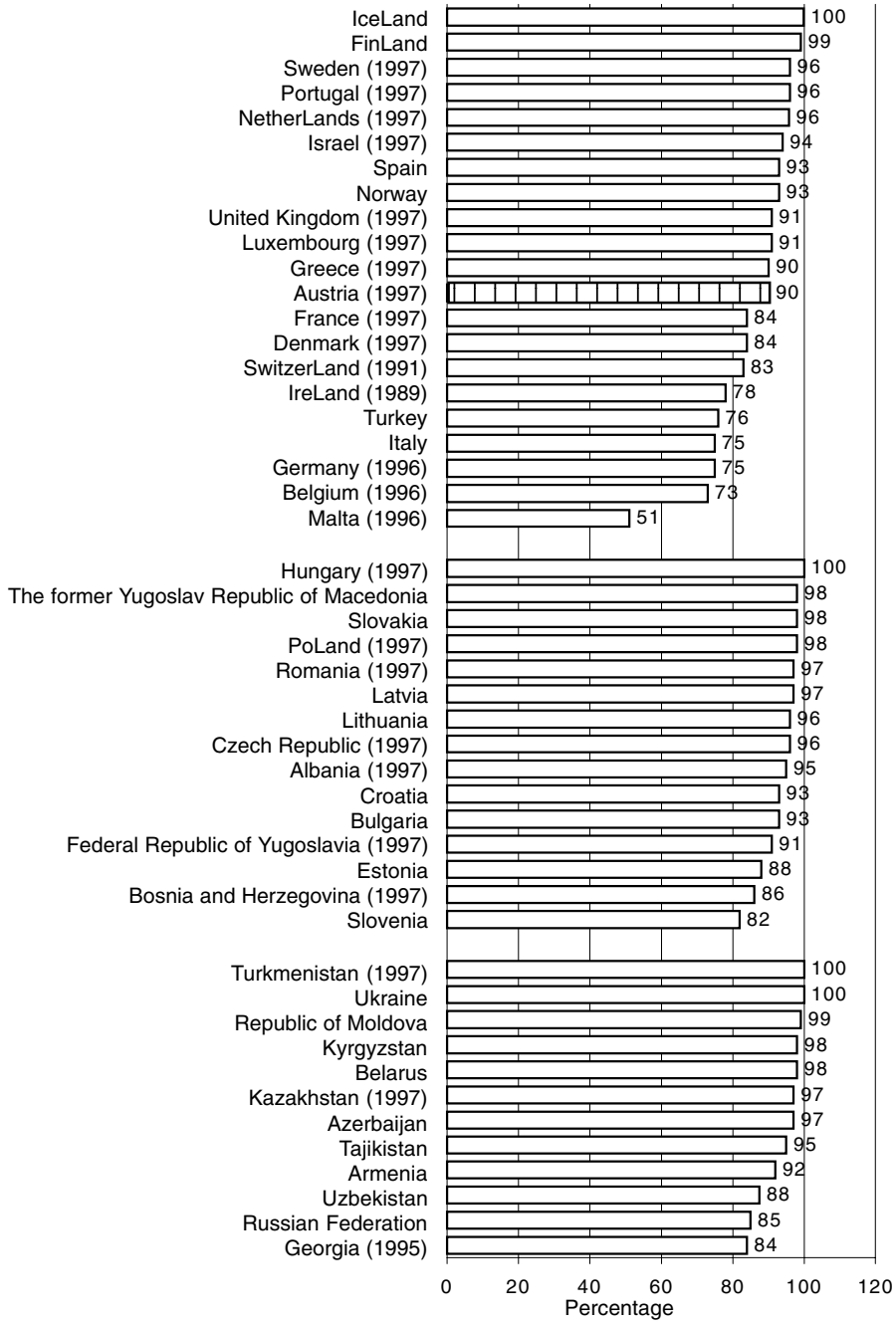
In all EU member states, with the exception of Ireland, France, Germany and Belgium, the measles immunization rate was 90–100%. In Austria, 90% of the population had been immunized against this infectious disease in 1997. It is interesting to note that in some cases the immunization level is markedly higher in central and eastern European countries.

In Austria, seminars for public health service doctors have been organized twice a year since the early 1990s. At these seminars participants are taught about how to develop expert opinion and guidelines to harmonize the categorization of long-term care benefits. In addition, medical officers are offered courses in communication training and epidemiology.

Secondary and tertiary care

In Austria, inpatient health services are provided primarily by public organizations or by private non-profit organizations, which may also sometimes operate

Fig. 9. Levels of immunization for measles in the WHO European Region, 1998 (or latest available year)



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

according to public law. A hospital that is subject to public law is required to admit and provide health care services to all patients, whereas private, profit-oriented hospitals may, as a rule, reject prospective patients. Hospitals subject to public law are also entitled to state subsidies for recurrent costs. Such subsidies are paid when the range of services provided by a non-profit hospital is considered by the state authorities to be necessary to ensure service coverage.

Development of the inpatient health care sector has always been based on the hospital plan. So far, the emphasis has been mainly on planning the number of beds available (see the section on *Health care reforms*).

In order to implement the agreement between the federal and state governments under Article 15a (see the sections on *Organizational structure and management* and *Health care reforms*), amendments were passed to the Federal Hospitals Act, the various social insurance acts, the Doctor's Act (in order to amend doctors' obligation to be personally present in hospitals), and a Federal Act on Public Health Documentation, as well as an amendment to the Fiscal Equalization Act. In view of the shortage of data in hospital outpatient departments, the act governing documentation is very important because it regulates the initial steps for introducing diagnosis and services documentation in the outpatient sector.

Hospital outpatient departments are internal service providers for the hospital wards, and they are also crucial with regard to primary emergency care. Nevertheless, so far, they have been mostly excluded from planning as well as from financing according to diagnosis-related groups (or LKF) which was introduced in 1997 (see the section on *Hospital outpatient departments*).

Morbidity

Table 16 indicates the morbidity rates of patients treated in Austrian hospitals. In 1997, a total of 2.1 million people were hospitalized, an increase of 20% over 1990. The number of hospital stays per 100 000 inhabitants who were treated for blood disorders, psychiatric problems and diseases of the nervous systems or sensory organs grew by 40%–50% over the period of observation. Blood disorders alone were at the root of only 0.7% of hospital stays (see Table 16). The number of people per 100 000 inhabitants who suffered from infectious diseases, skeletal diseases and malignant tumours was up by 27%.

Births and pregnancy complications decreased by 9%, as was the case for the category of miscellaneous causes, –17%. This last decrease is due to keeping more precise documentation.

For men, the main causes of hospitalization are injuries, poisoning and diseases of the circulatory system; for women they are diseases of the circulatory

Table 16. Inpatient stays per 100 000 population, broken down by main diagnosis, 1990–1997

ICD-9	Main diagnosis	1990	1995	1997	In percent 1997 (ranking)	Change 1990–1997 (ranking)
001-009, V01-V99	All diagnoses	23 121	24 406	26 531		14.8
001-139	I. Infectious and parasitic diseases	526	581	671	2.53 (13)	27.6 (4)
140-239	II. Neoplasms	2344	2688	2989	11.26 (2)	27.5 (6)
240-279	III. Endocrine, nutritional, and metabolic diseases and immunity disorders	780	773	855	3.22 (11)	9.7 (12)
280-289	IV. Diseases of the blood and blood-forming organs	111	131	172	0.65 (17)	55.0 (1)
290-319	V. Mental disorders	991	1033	1470	5.54 (10)	48.3 (2)
320-389	VI. Diseases of the nervous system and sensory organs	1301	1579	1875	7.07 (7)	44.1 (3)
390-459	VII. Diseases of the circulatory system	3254	3589	3856	14.53 (1)	18.5 (7)
460-519	VIII. Diseases of the respiratory system	1718	1774	1913	7.21 (6)	11.4 (10)
520-579	IX. Diseases of the digestive system	2180	2195	2283	8.61 (5)	4.8 (13)
580-629	X. Diseases of the genitourinary system	1699	1650	1731	6.52 (8)	1.9 (15)
630-676	XI. Complications of pregnancy, child birth, and the puerperium	1755	1627	1594	6.01 (9)	-9.2 (17)
680-709	XII. Diseases of the skin and subcutaneous tissue	451	401	432	1.63 (14)	-4.2 (16)
710-739	XIII. Diseases of the musculoskeletal system and connective tissue	1862	2113	2375	8.95 (4)	27.5 (5)
740-759	XIV. Congenital abnormalities	175	180	203	0.76 (16)	15.9 (8)
760-779	XV. Conditions orginating in the perinatal period	152	152	170	0.64 (18)	11.3 (11)
780-799	XVI. Symptoms, signs and ill-defined conditions	652	826	751	2.83 (12)	15.2 (9)
800-999	XVII. Injury and poisoning	2897	2873	2965	11.17 (3)	2.4 (14)
V01-V99	XVIII. Miscellaneous causes for hospital treatment	274	243	228	0.86 (15)	-16.9 (18)

Sources: Gesundheitsstatistisches Jahrbuch, Statistik Österreich 1998, IHS HealthEcon 2000.

system and cancer. Overall, diseases of the circulatory system were the primary cause of admission to hospital in 1997 (14.5% of all admissions), followed by cancer, injuries and poisoning, and diseases of the musculoskeletal system and connective tissue. Blood disorders and conditions arising during the perinatal period ranked lowest among hospital stays in 1997.

Hospitals and bed structure

Table 17 summarizes the number of hospitals, the number of beds actually provided[15] and the number of beds as a percentage of total capacity, broken down by ownership and hospital type, for 1998.

Altogether, 72 078 beds were available in 330 hospitals in 1998, which translated into 8.9 beds per 1000 inhabitants. In the same year and in terms of hospital ownership, 60% of beds were provided by the Länder (44.0%) and communities or associations of communities (16.4%). Of the remaining beds, 16.3% were owned by religious orders or religious communities. Although 15% of hospitals were operated by private entities in 1998, they contributed only 4.6% to the overall capacity of beds. The health insurance funds owned 12% of the hospitals, which in turn provided 7.8% of the beds. The hospital wards of the nursing homes operated by the City of Vienna supplied 7.9% of the bed capacity in 1998.

Table 17 provides a summary of the number and sources of hospital beds. Broken down by hospital type, 36.7% of beds are general hospitals, operated mainly by the Länder and comprising 61% of the stock of beds. About the same share is held by specialist hospitals which, however, offer only slightly more than a third of the beds available in general hospitals. Nursing homes make up about 13% of hospitals, but have just 4.4% of the bed capacity. The situation is similar for sanatoriums

Austria has three university teaching hospitals (Graz, Innsbruck and Vienna) which together offer about 5500 beds.

Table 18 shows the breakdown of capacity by size of hospital. By the end of 1998, some 70% of hospitals provided just 30% of beds. These 70% had fewer than 200 beds each and more than half actually had fewer than 100 beds or 7% of the overall stock. About 70 hospitals, together supplying another 30% of total beds, fell within the 200–500 beds category. In the 500–999 beds category, 21 hospitals supplied another 20% of Austrian hospital beds. When university hospitals are included, Austria had, in late 1998, nine hospitals with more than 1000 beds, which together made up 20% of the total number of beds.

[15] The number of beds actually provided usually is higher than the standardized number of beds, which is due to demand fluctuations.

Table 17. Structure of hospitals and beds, 1998

	No. of hospitals	No. of hospitals as % of total number of hospitals	No. of beds	No. of beds as % of total number of beds
	Hospitals and beds, broken down by ownership			
Federal government	12	3.6	656	0.9
State government	82	24.8	31 700	44.0
Local government	67	20.3	11 853	16.4
Health insurance funds	40	12.1	5 635	7.8
Religious orders, religious communities	48	14.5	11 759	16.3
Associations	19	5.8	1 488	2.1
Private entities	49	14.8	3 294	4.6
Total number of hospitals	317		66 385	
Hospital wards at the nursing homes of the City of Vienna	13	3.9	5 693	7.9
Total	330	100.0	72 078	100.0
	Hospitals and beds, broken down by hospital type			
General hospitals	121	36.7	44 142	61.2
Specialist hospitals, total	104	31.5	15 632	21.7
Convalescence homes	7	2.1	461	0.6
Nursing homes for the chronically ill	43	13.0	3 169	4.4
Maternity hospitals	1	0.3	13	0.0
Sanatoriums	41	12.4	2 968	4.1
Hospitals, total	317		66 385	

Sources: Gesundheitsstatistisches Jahrbuch 1999 – Statistik Österreich 2000, IHS HealthEcon 2000.

147 hospitals (45%) are so-called "fund hospitals". Essentially they include public and non-profit acute hospitals (excluding emergency hospitals), and they are financed from public budgets via Länder. These fund hospitals provided 51 872 actual beds, or 72% of the total bed capacity in Austria in late 1998. More than 80% of hospital staff work in fund hospitals.

The fund hospitals provided medical care to about 2 million inpatients in 1998. The hospitalization rate for fund hospitals is 25%, i.e. on average one out of four Austrians stayed in a fund hospital as an inpatient once in 1998. The bed-to-population rate was 6.4 per 1000 inhabitants or 156 inhabitants per bed. For patients staying in a fund hospital between 1 and 28 days, average length of stay per patient was 6.6 days, or 1.8 days per inhabitant.

International comparison

In 1997, the EU average for acute beds was 441 per 100 000 inhabitants, whereas for Austria the ratio was 579 (see Fig. 11). The difference in acute care bed

Table 18. Hospital size, 1998

No. of hospitals, %	Bed categories	Percentage of total beds
70	< 200	30
21	200–500	30
6	500–999	20
3	> 1000	20

Source: BMSG 1999.

supply between Austria and the EU average of 140 beds per 100 000 inhabitants was already visible in 1988, when the figures were 641 for Austria and 509 for the EU average. In the period 1990–1997, the EU average for acute beds declined by 12%, while in Austria it declined by 7.5%. Compared to other western European countries, the ratio of acute beds ranks second after Germany, and lies above Luxembourg, Belgium and Switzerland (see Fig. 10). The difference in the ratio calculations results from the use of two sources. Fig. 11 is based on internal calculations in Austria, whereas Fig. 10 uses data from the WHO health for all database (WHO Regional Office for Europe).

Features of hospital care in Austria

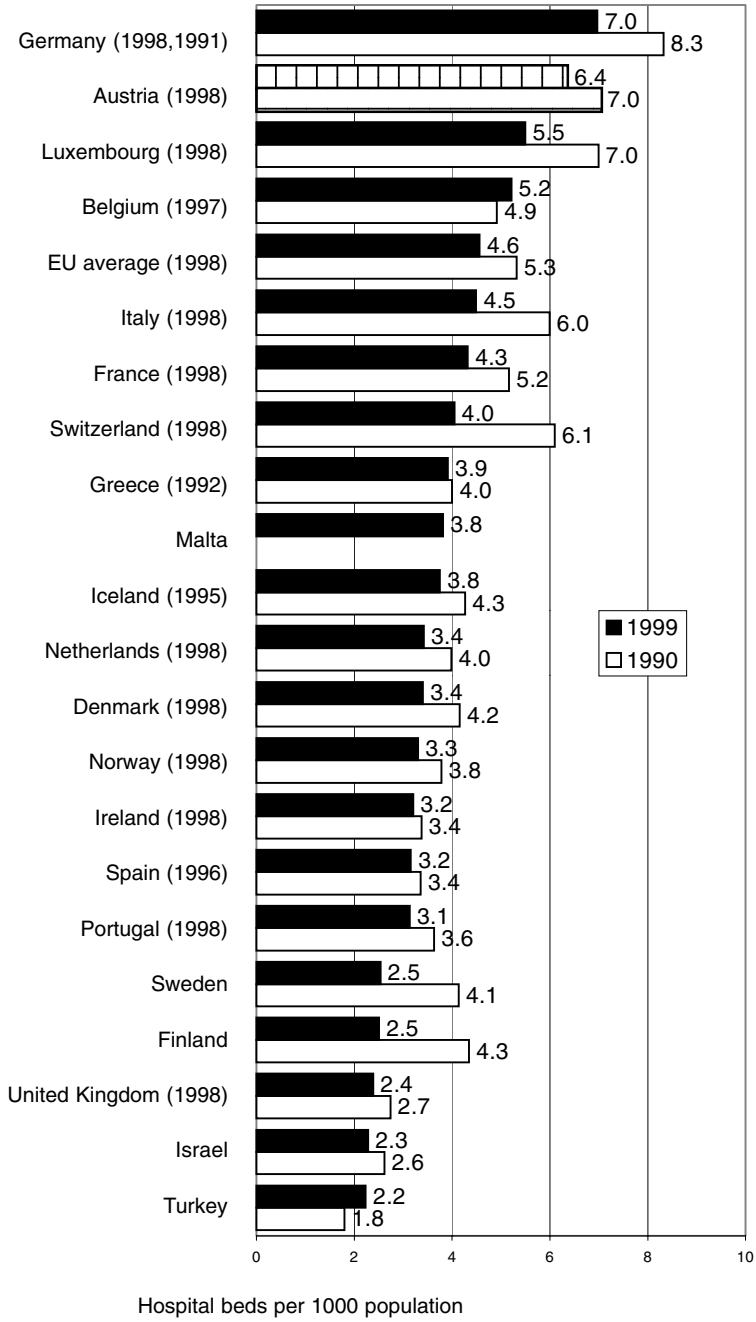
Between 1980 and 1997, the number of Austrian hospitals was cut by 5%, a reduction also reflected in the EU average. Bed capacity was 20% lower than in 1980; in the EU, it was 25% lower (see Table 19).

The average length of stay was halved over the same period. The reduction was about 6 percentage points greater in Austria than the reduction in the EU average. Occupancy rate was about constant in the EU, at 77.3% in 1997, but declined by 9% in Austria, to 74% in 1997. Admission rates rose by more than 25% both in Austria and in the EU in general. By 1996, the Austrian admission rate was 3 percentage points above that of the EU average.

The trend in hospital performance and utilization may reflect that increasing admission rates are not just a problem of missed opportunities for bed capacity adjustment, but are a consequence of increasing possibilities for treatment now available due to medical progress. Shorter stays combined with growing admission numbers are clear evidence of an increase in production intensity in the hospital sector. A similar pattern can be found throughout the EU. In acute hospitals, patients had average stays of 6.7 days in 1997 and 6.6 days in 1998; preliminary figures for 1999 indicate a further decline to 6.5 days.

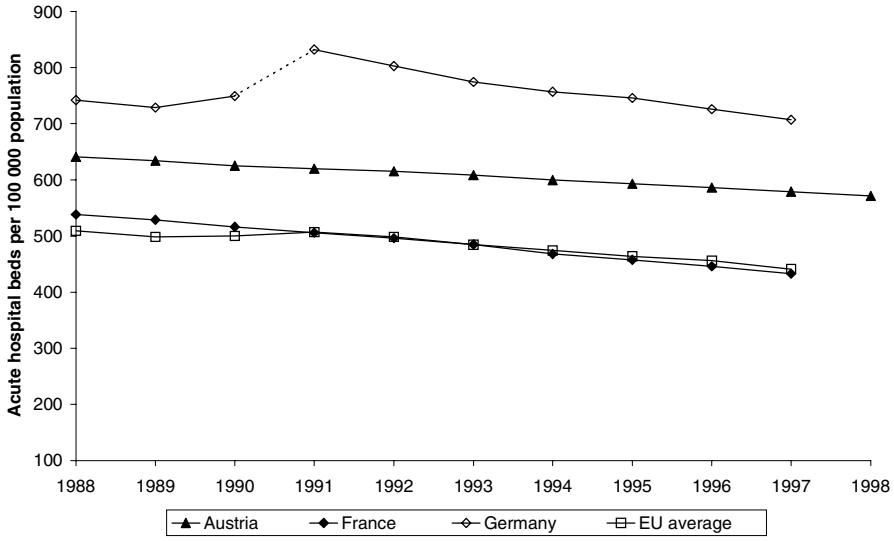
Table 20 illustrates the dynamic growth of the hospital sector and health care sector in general. Annual average growth rates in 1990–1998 were 6.9% for fund hospitals, and 6.5% for health care expenditure as a whole. Compared to a growth rate of 4.7% for the nominal gross domestic product, the pace of

Fig. 10. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 1999 (or latest available year)



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

Fig. 11. Number of hospital beds in acute hospitals per 100,000 population in Austria and selected countries, 1970–1997



Source: WHO Regional Office for Europe health for all database; BMSG, IHS HealthEcon 2000.

hospital costs growth at 6.9% was some 2 percentage points higher. In the early 1990s, growth rates in the hospital sector reached double figures. By the mid 1990s, and in particular between 1995 and 1996, the growth rate was as low as 2.4%. By 1998, the growth rate (3.1%) was higher by 1.3 percentage points than in 1997 (1.8%). Preliminary data available for 1999 shows a growth rate of about 4%. Slightly more than half of the expenditure of fund hospitals is spent on staff, 26% on external services, energy, charges and other costs, and 13% on medical goods. Depreciation accounts for 9%. In 1998, the costs of

Table 19. Inpatient facilities utilization and performance

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
No. of hospitals per 100 000 inhabitants	4.3	4.4	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1
No. of beds per 1000 inhabitants	11.2	10.9	10.2	9.9	9.7	9.4	9.3	9.3	9.2	9.0
Cases per 100 inhabitants	19.5	21.6	23.4	23.6	23.9	24.0	24.4	24.7	25.1	26.7
Average length of stay in days	17.9	14.1	13.0	12.4	12.0	11.5	11.2	10.9	10.5	9.7
Occupancy rate in percent	-	81.4	78.1	77.5	77.1	76.6	75.8	75.9	75.1	74.0

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

Table 20. Hospital costs, 1990–1998

	Final hospital costs[a] in ATS million	Annual % change	Total health care expenditure, ATS million	Annual % change	GDP, ATS million	Annual % change	Hospital costs as % of total health care expenditure	Hospital costs, as % of GDP	Total health care expenditure as % of GDP
1990	54 078		130 602		1 813 482		41.4	3.0	7.2
1991	60 392	11.7	140 794	7.8	1 945 822	7.3	42.9	3.1	7.2
1992	67 965	12.5	157 301	11.7	2 057 271	5.7	43.2	3.3	7.6
1993	74 564	9.7	171 167	8.8	2 125 343	3.3	43.6	3.5	8.1
1994	81 359	9.1	180 359	5.4	2 237 938	5.3	45.1	3.6	8.1
1995	85 551	5.2	206 724	14.6[b]	2 375 170	6.1	41.4	3.6	8.7
1996	87 567	2.4	215 640	4.3	2 453 240	3.3	40.6	3.6	8.8
1997	89 118	1.8	207 014	-4.0[b]	2 522 222	2.8	43.0	3.5	8.2
1998	91 913	3.1	216 212	4.4	2 610 914	3.5	42.5	3.5	8.3
Growth rates									
1990–1998	6.9		6.5		4.7				
1995–1998	2.4		1.5		3.2				

Sources: BMSG, Structural Fund, Statistik Österreich 2000, IHS HealthEcon 2000.

[a] including depreciation; final costs are costs adjusted by cost reductions and internal transfers; examples of cost reductions would be non-medical services rendered by a hospital for external demand (e.g. "Meals on Wheels", laundry services, etc.).

[b] These changes are due to a change in the national accounts to the EU system ESA 95, recalculated to the 1995–1998 series, and must be interpreted in the light of the accounting practices.

fund hospitals made up 42.5% of total health care expenditure, an increase of 1% over 1990. The costs of fund hospitals as a share of GDP were 3.5% in 1998 while health care expenditure in general was 8.3% of GDP.

Admission rates to the acute hospitals in Austria are the highest in western Europe, at nearly 26% in 1998 (see Table 21). At 6.4 per 1000 inhabitants, the acute bed-to-population ratio was markedly above that in comparable countries. The average length of stay at 6.8 days was comparatively short, placing Austria in the upper middle ranking. The occupancy rate was around 75% in Austria, lower rates were found in Finland, Italy, Luxembourg and the Netherlands. In spite of ongoing efforts to achieve further reductions in the number of acute beds, which had already been cut by slightly more than 3% since the early 1990s, the comparison indicates that Austria continues to have a relatively high number of acute beds. This may be linked to the fact that the outpatient sector is not being reformed in accordance with reforms in the inpatient sector, and therefore the bias towards hospital-centred care remained. On

Table 21. 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.

the other hand, the widening gap between high admission rates and decreasing average lengths of stays can be observed in all developed countries. Thus, it may well reflect an endogenous trend, i.e. based on advance in medical technology, rather than being solely a capacity issue.

Social care

Social care, i.e. long-term inpatient care and social services, covers services including psychiatry, rehabilitation and long-term care. Long-term care in particular is characterized by considerable decentralization. Some 118 000 people required comprehensive long-term care and 445 000 required assistance in 1996.

Psychiatry

Like hospitals, psychiatric services fall mainly under public management. Since the 1970s, there has been a constant reduction of beds in this sector and a significant reduction in lengths of stay. The average stay was 95 days in 1980, but only 20 days in 1998. The number of acute beds was halved to 5446 by 1998. This translates into 6.8 psychiatric beds per 10 000 inhabitants. The concurrent growth and extension of outpatient psychiatric services so far has been spread unevenly throughout the Länder.

The hospital investment plan, as amended by the federal government in 1999, for the first time includes planning principles and guidelines for psychiatric services. Based on the principles of equity of need, proximity to communities and integration, outpatient rather than inpatient services, regionalization, networking and coverage obligations, integration with primary health care, quality assurance and participation, the plan identified the number of beds required for areas with acute hospitals. The recommendations regarding location and beds are based on the bed indices for the specialist sector. By 2005, 4311 beds, at 37 locations, are to be made available for psychiatric services, always provided that the outpatient sector will be extended.

It was agreed that each Land will define, and decide with the federal government, which regions would supply care to the mentally ill and mentally disabled. Intermediate care and outpatient facilities are to be established and/or extended. Together with psychosocial services, assessments of accommodation, day care and work will be made. One of the objectives is to achieve a uniform design for the plans across all Länder.

Rehabilitation

Rehabilitation of mentally and physically impaired people aims at restoring or improving their health, re-integrating them in society and, in particular, into working life, as well as enabling them to return to a proper position in society, as permanently as possible and without assistance or long-term care.

The social insurance acts provide for a number of medical, occupational and social measures for rehabilitation with a view to achieving these goals. These laws make a strict distinction between medical rehabilitation, medical treatment of the consequences of accidents, preventive health care and a general strengthening of health. Since 1992, the health insurance funds have been obliged to grant medical rehabilitation also to the family members of insured people and to old-age pensioners.

The health and work accident insurance funds have about 4000 beds for medical rehabilitation in 29 specialist hospitals. Not-for-profit facilities account for about 1000 beds, while 11 000 beds are provided by convalescence, spa and recovery homes. Of these, 2000 are funded by the social insurance funds. Capacity in the contract facilities was increased by 15% between 1988 and 1995 while those in facilities run by the social insurance funds themselves remained constant. Similar to the trend in inpatient services, rising admission rates were accompanied by falling average lengths of stay (ALOS) in the rehabilitation sector. Over seven years, admissions grew by 15% while average stays fluctuated: after a reduction, ALOS have risen again since 1997. However, in contrast to the inpatient sector, the number of beds rose by almost 15%, and bed occupancy rate by about 2% (*15*).

Social insurance funds spent Euro 566.8 million (ATS 7.8 billion) on rehabilitation in 1998, of which 39% was from the social health insurance funds. Of the total expenditure by health insurance funds, 1.7% (*16, 17*) was spent on rehabilitation in 1998. Expenditure on rehabilitation has been growing over several years. Expenditure on medical rehabilitation paid by the social health insurance institutions increased by almost 30% between 1996 and 1998. Contrary to the hospital sector, rehabilitation is characterized by a lack of uniformity and completeness of documentation. The lack of coordination capacity has caused gaps in coverage, especially with regard to neuro-rehabilitation (*15*).

Long-term care

In 1993, the Federal Act Governing Long-term Care Benefits was passed to harmonize long-term (nursing) care. This federal act, combined with nine more

or less identical state acts, introduced categorized needs-based long-term care benefits, regardless of income, property ownership or reason for long-term care. The benefits are funded from general tax revenues. Altogether some 4% of Austrians (more than 265 000 people under the federal act and more than 46 000 under the state acts) receive these benefits, which are categorized into seven levels (in 2000 the levels ranged between Euro 145.35 and 1531.51, or ATS 2000 and 21 074) and paid 12 times a year. About 80% of the beneficiaries are included in levels one to three, most of them in level two (42%).

This reorganization of long-term care in Austria aims to enable people in need of long-term care to lead an independent and fulfilling life in spite of their limitations. The system, which covers older and disabled people, provides for cash and in-kind benefits and is founded on an agreement regarding joint activities by the federal and state governments (Article 15 a of the constitution). It is based on a catalogue of services and quality standards for the outpatient and inpatient sectors. Based on the agreement and on plans by the Länder, the following guiding principles may be identified: independence, needs-based, integration and normalization, leaving people in their own social environment, right to receive care according to needs with assured supply, quality assurance and professionalism, economic efficiency, choice and support of informal care (*18*).

Within the legislative framework, states and municipalities are free to specify long term care plans. The services and facilities for old people usually comprise outpatient care, intermediate care (e.g. day care centres) and inpatient services.

Outpatient services

In 1997, some 5770 care providers (full-time equivalents) were available for outpatient care. These services are mostly provided by home helpers (4000), and health workers and nurses with advanced training (900). Other care providers include carers for old people and nursing aides. Services vary considerably between regions, as does the qualification structure. According to estimates, the need for outpatient nursing and social services will rise to 6700 care providers by 2010.

Intermediate care services

The main facilities in this sector are geriatric day care centres, which are still rare outside the big cities. Most of the Länder pursue a course of gradually extending their range of intermediate care services.

Inpatient services

In 1997, Austria had some 64 800 places in residential and nursing homes, which translates into 126 for every 1000 people aged 75 or older. Of these places, 30 400 (56%) were nursing places, and 23 600 (44%) were residential places. Once again, regional differences are considerable. Old age homes and nursing homes employed 13 200 nursing and care staff (full-time equivalents). It is estimated that the need for residential home places will rise by 5200 to 70 000 in 2010, and the need for nursing home places by 8000. In view of the growing need for nursing care places and the still unfulfilled qualification requirements among staff, an increase is expected in the demand for health and nursing staff with advanced training.

Services and facilities for the disabled include day care centres and supervised accommodation. In 1999, a total of 10 220 places were available in day care centres for mentally disabled or multiple-disabled people, or 13 places per 10 000 inhabitants. Distribution by Länder is relatively balanced. Supervised accommodation was offered to 5500 people, and here the distribution is highly unequal. According to estimates, supervised accommodation needs to be increased by 2500–10 500 places.

Table 22. Selected occupational groups in health care, 1970–1997 (head count)

	1970	1980	1985	1990	1995	1997	% of all employees	% of total	Change 1970–1997
Doctors, total	13 682	18 888	21 676	26 003	31 275	32 849		31.7	140.1
General practitioners	5 388	5 735	6 770	8 394	9 955	10 568			96.1
Specialists[a]	6 160	8 589	9 670	11 590	14 834	16 502			167.9
Trainee doctors[b]	2 134	4 564	5 236	6 049	6 513	5 779			170.8
Employed in hospitals									
Doctors	–	8 040	9 966	12 622	15 782	16 247	18.6		102.1[c]
Nurses	14 682	22 186	26 596	30 842	40 756	42 972	49.3	41.4	192.7
Medical-technical staff	2 272	4 355	5 824	7 156	9 332	9 982	11.4	9.6	339.3
Midwives	579	770	827	865	1 168	1 025	1.2	1.0	77.0
Paramedics	7 467	13 114	14 186	17 003	17 741	16 956	19.4	16.3	127.1
Hospital employees, total	25 000	48 465	57 399	68 488	84 779	87 182	100.0		
1970=100	100	193.9	229.6	274.0	339.1	348.7			
Total	38 682	59 313	69 109	81 869	100 272	103 784		100.0	
1970=100	100.0	237.3	276.4	327.5	401.1	415.1			

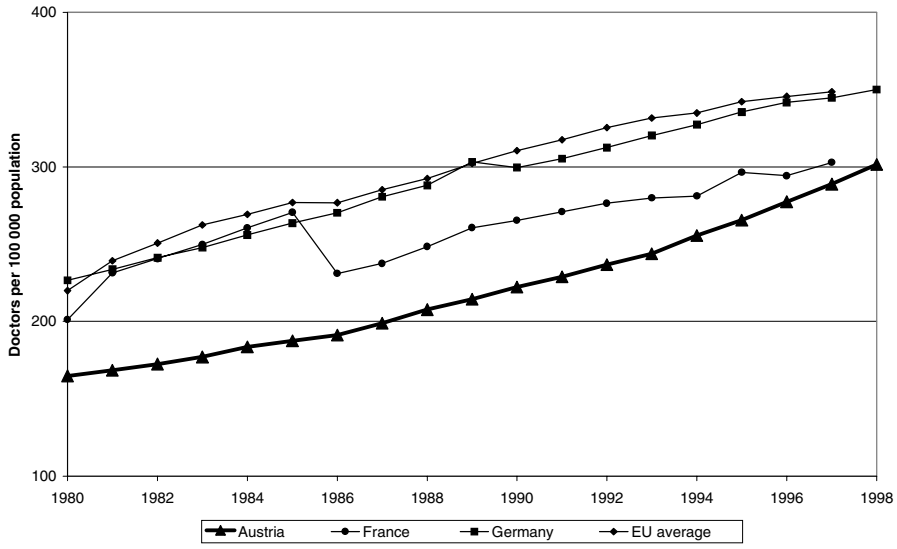
Source: Gesundheitswesen in Österreich – edition of summer 1999, Gesundheitsbericht an den Nationalrat 1997, BMSG 1997, IHS HealthEcon 2000.

[a] Including dentists

[b] Excluding foreign doctors working in Austria for study purposes

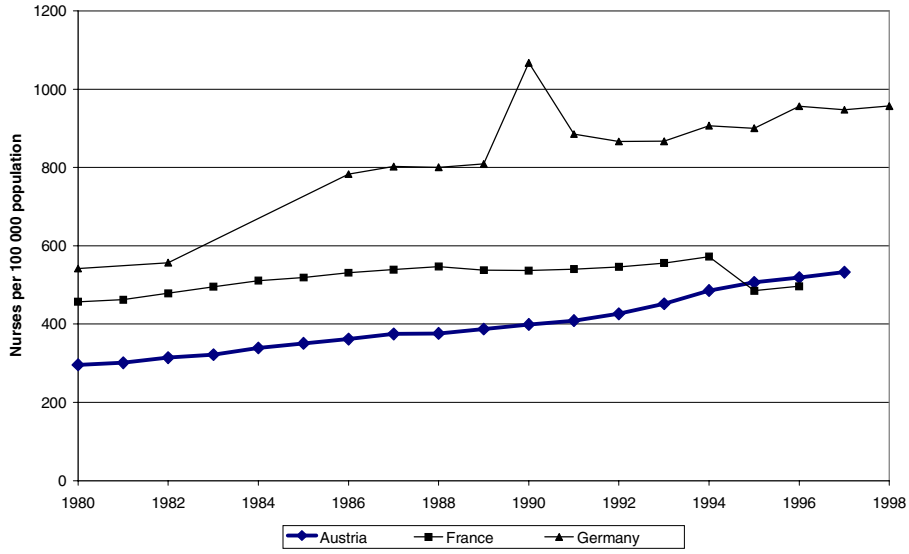
[c] 1980–1997.

Fig. 12. Number of doctors per 100 000 population in Austria and selected countries, 1980–1998



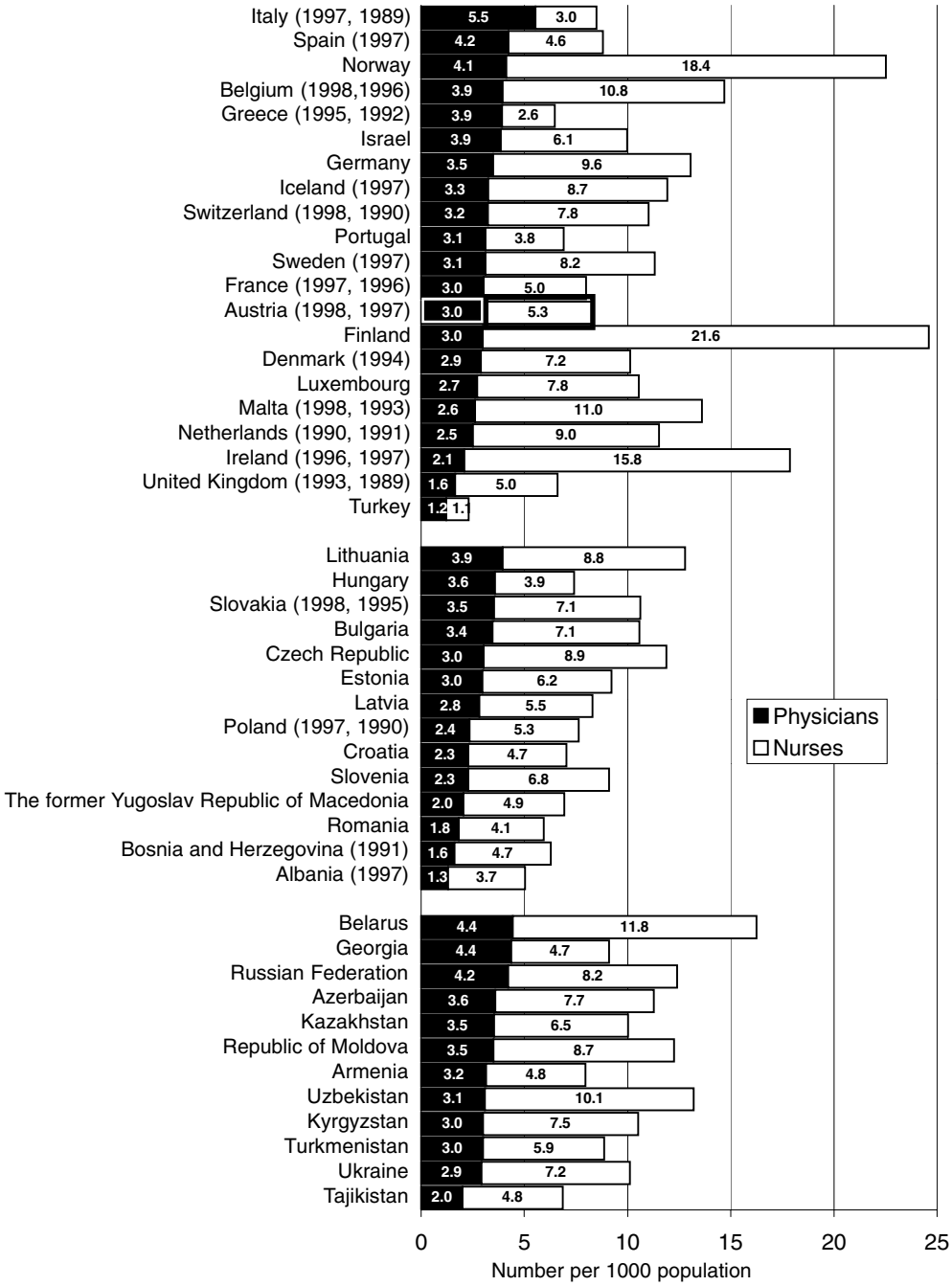
Source: WHO Regional Office for Europe health for all database.

Fig. 13. Number of nurses per 100 000 population in Austria and selected countries, 1980–1998



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

Fig. 14. Number of physicians and nurses per 1000 population in the WHO European Region, 1998 or (latest available year)



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

Human resources and training

Between 1995–1999, employment rose 1.3% in Austria. In the services sector, the growth was 5.2% and in the health, veterinary and social sector, it was 9.8%. By 1999, 4.6% of the total number of employees were working in this sector. This incidentally does not include employees working in public health administration and in the social insurance funds, so that the share of employees in health care is underestimated. The health care sector is a major employer of women: 367 women are employed for every 100 men in the health, veterinary and social sectors. When looking at all employees across sectors, the ratio was 100 men to 77 women.

In 1997, a total of 103 784 people were working in health care, which represents a quadrupling of the figure since 1970. In 1997, 32% of these were doctors while 41.4% were nursing staff. The total number of active doctors rose by 140% between 1970 and 1997; the number of specialist doctors and doctors still in training grew by 170%. By 1997, the number of nursing staff had doubled since 1970. The increase in the number medical-technical staff was greatest at 300%.

For hospital staff, employment levels were 3.5 times higher in 1997 than in 1970. In 1997, 19% of hospital staff were doctors and almost 50% were nurses. Paramedical services made up about 20% of all employees, and medical-technical services about 11% of employees.

The number of doctors per 1000 inhabitants was 5.3 in Austria in 1997, (see Fig. 12) some 0.6 persons per 1000 lower than the EU average. When including trainee doctors, the doctor-to-population ratio was 4.0 per 1000 inhabitants, which was above the EU average.

Training

Doctors

In 1997, 5779 Austrian residents were training for medical practice. This was an increase of 170% over the level in 1970 (see Table 22). Of this number, 1600 were first-year students. Together with foreign first-year students they totalled about 2000. In 1997, 3544 trainee places in hospitals and another 900 in recognized doctors practices were available for 1071 graduates. In contrast, imbalances now are expected to arise between the number of training places available and the number of interns of both general practitioners and specialists waiting for such places. With current training facilities, about 660 postgraduate places fall vacant each year for general or specialist training while the number of graduates from medical schools has risen to 1420 (*15*).

Table 23. Number of health care professionals in the WHO European Region per 100 000 population, most recent year available (professionals including trainees)

	Physicians	Dentists	Nurses	Pharmacists	Midwives
Austria	314.9	47.2	569.3	55.4	18.6
Belgium	406.2	70.1	1 130.5	149.3	67.3
Denmark	297.7	90.5	755.9	20.6	22.3
Finland	310.1	95.6	2 247.4	151.5	82.8
France	311.4	69.6	522.0	104.3	22.6
Germany	364.3	77.8	975.9	59.7	11.9
Greece	405.2	105.6	261.1	–	20.0
Iceland	341.8	107.4	901.4	87.5	88.5
Ireland	224.5	49.1	1 618.7	75.9	420.9
Italy	570.3	65.8	31.2	106.1	–
Luxembourg	271.7	65.8	813.1	69.4	23.0
Netherlands	260.5	48.3	941.6	18.7	9.8
Norway	420.3	119.0	1 840.2	57.1	59.1
Portugal	317.1	36.3	398.3	78.5	0.3
Spain	435.3	39.6	478.5	120.1	–
Sweden	320.3	154.5	855.0	68.1	73.8
Switzerland	334.6	50.2	824.2	63.7	27.5
Turkey	128.3	22.5	118.1	35.0	67.4
United Kingdom	170.0	41.0	–	67.2	–

Source: WHO Regional Office for Europe health for all database.
Note: data represent the latest available staff figures + trainees

Medical education and training in Austria is organized as a dual system. Students may study medicine at one of three faculties in Austria (Vienna, Innsbruck or Graz). The minimum requirement for all medical professions is completion of a six-year course. Graduates then enter a practical training programme, the length of which depends on the field of specialization chosen. General practice training is usually three years while specialization may take between four and six years. Graduates may only be admitted to some specialist training after having first completed three years of general practitioner training.

The statutory basis of university medical education is the General University Studies Act and the regulations for medical education, which are issued by the Ministry of Science. Postgraduate education is governed by the Doctors' Act and the Regulations for Medical Training. Training facilities for postgraduates in hospitals are regulated by the Ministry of Health; those in university clinics require additional approval by the Ministry of Science.

To obtain the right to engage in private medical practice, medical school graduates have to complete either three years of vocational training for general medical practice or a six-year programme in a specialty. Since 1995, trainees

have been required to spend some time in primary care (training practices, training clinics, outpatient departments), and the rest on rotation at various hospital departments. Hospitals providing training in general medical practice are issued a global license for vocational training. On average, hospitals employ one trainee general practitioner per 15 standard hospital beds.

Postgraduate training in one of the 44 specialities takes six years and is open, in principle, to all medical school graduates. For the position of medical officer, doctors require training in general medical practice (*ius practicandi*) and must have completed a two-semester course in public health. The curriculum of this programme includes subjects like general hygiene and environmental hygiene, legislation governing paramedical services, forensic medicine, forensic psychiatry, toxicology and social medicine.

Certified health care and nursing professionals

Members of all nursing professions require three years' training. Nursing schools may be established only at hospitals with the requisite number of specialist departments for practical training. In 1997, 67 schools provided training in general nursing, 12 in paediatric and neonatal nursing care, and 11 in psychiatric nursing. In 1997, 84% of the 7,481 graduates of general and paediatric nursing programmes were female. In psychiatric nursing, 59% were women.

In June 1997, the Lower House (National Council) passed new legislation regulating health and nursing care. The legislation acknowledges nursing as an activity in its own right and defines areas in which nurses have sole or shared responsibility, interdisciplinary fields of work, and a wide range of special duties. Due to budget consolidation measures, the original intention of establishing a five-year professional school and a three-year college for health and medical care has not been realized.

Where the number of doctors relative to nursing staff is comparatively high, one might conclude that in such countries doctors still work in areas that in other countries have already been taken over by nursing staff. The ratios of health care professionals to population listed in Table 23 do not show any correlation between high (low) doctors-to-population ratios and low (high) nurses-to-population ratios. Thus, it is not possible to draw any conclusion regarding substitution effects or employment efficiency. At the time of the survey, the number of active doctors in western Europe was 327 per 100 000 persons on a non-weighted country average. The corresponding figure for nursing staff was 849. The dispersion of the nurses-to-population ratio is four times as high as that of the doctors-to-population ratio. Austria, Denmark and France are in the middle range for both nursing and doctor ratios. The other

professions also show substantial variation between countries. As a general observation it may be assumed that the methods for recording health care professionals other than medical doctors vary widely across the countries and comparisons are therefore problematical. Also, employment figures are often distorted by the fact that part-time work is very common in this area, particularly in jobs held mainly by women.

Medical-technical services

This group comprises seven professions, the most important of which are laboratory services, radiological services and physiotherapy services. In 1997, training for medical-technical (specialist) professions was provided by 53 academies, with a 2993 students. 82% of the students were women. After Austria's accession to the EU, training programmes were adapted to EU directives. Since 1992, a new three-year training programme has been offered. The first graduates from a course conforming to the new training regulations received their diplomas in the autumn of 1996.

Midwives

In 1997, midwives accounted for about 1% of hospital staff (see Table 14 and Table 22). Here again, EU membership required changes to midwifery training. The reform of the training programme focused mainly on the extension of training from two to three years and updating the curriculum. In 1994, the new Midwives Act became effective, which brought about changes in the practice of the profession, training and responsibilities. Since that date, training has been open to students – both female and male – meeting the entrance requirements for university or having passed an examination entitling them to enrol in medical studies. In addition, the federal government's monopoly on training that it held prior to 1994 was lifted and the requirement that midwives are obliged to undertake continuing professional development training was established. A system under which midwives working in maternity wards are also involved in providing follow-up care to new mothers and their babies or that pregnant women may bring their personal midwife to hospitals is already being implemented successfully under pilot schemes operated in a number of maternity facilities.

Other health care workers

In 1997, 16 956 people were employed in the delivery of paramedical services. This is a 127% increase since 1970. This rise is much less substantial than that observed in nursing staff (see Table 22), which is seen as another indicator of the increasing specialization and professionalization taking place in the health care system. Paramedical staff are employed in ten different occupations, among

which nursing assistants, with a share of 70%, is the most important. Nursing assistants are trained in courses held in general hospitals, hospitals for the chronically ill, or in nursing homes. All courses are directed by a medical doctor. Training in practical skills is provided by staff holding nursing diplomas.

Pharmaceuticals

Pharmaceuticals dispensing

In Austria, pharmaceuticals are dispensed through pharmacies and dispensing doctors, who supply pharmaceuticals to patients in rural areas. In 1996, 47% of retailers of pharmaceuticals were dispensing doctors. Since 1990, the number of rural pharmacies has increased relative to the number of dispensing doctors.

Slightly more than 90% of all pharmaceuticals being marketed in Austria are licensed drugs (see the section on *Organizational structure and management*). In 1997, 60.4% of licensed drugs were prescription drugs (*19*). Compared with 1980, the share of prescription drugs has decreased by more than 20%. Over a period of six years, prescription rules have been relaxed. At the same time, a more restrictive approach has been pursued with regard to including drugs in the social insurance funds' approved list of drugs and therapeutic products. Compared with 1990, the share of prescription drugs on this positive list has also declined by 20% from 46.5% to 27%.

Those pharmaceuticals that have been included in the positive list maintained by the social insurance funds, may be prescribed by contract doctors (i.e. those doctors who have a contract with a health insurance fund) without any further approval procedure. Costs are reimbursed automatically. Any other drugs dispensed at the expense of social insurance funds are subject to approval by head doctors employed by the health insurance fund.

Generics are subject to the same licensing regulations as the original products and are included in the positive list if the price of the generic product, which must have the same ingredients, is 30% lower than that of the original. As a next step, a 20% price reduction is sought for the original product. The prices of original products are therefore generally 10% above those of generics.

Practitioners prescribing medication paid for by the health insurance fund have to observe guidelines on the cost-effective prescribing of therapeutic substances and aids. These guidelines are defined in the General Social Security Act (ASVG). Medical practitioners are called upon to choose the most cost-effective medication from among the products suitable for treating a condition. Adherence to these guidelines is monitored by the health insurance fund.

Practitioners who persistently exceed their peers' average prescription rates, may be required to refund the difference.

Since the 1990s, the number of prescriptions dispensed at the expense of social health insurance has increased steadily, at an average rate of 2.5% per year. In 1990, 10.5 prescriptions were dispensed per patient whilst in 1998 the figure was about 12.

Between 1990 and 1998, the health insurance funds' expenditure on pharmaceuticals rose about four times faster than the number of prescriptions. Between 1995 and 1997, the number of prescriptions dispensed at the expense of social health insurance funds decreased, which may indicate that the increase of the prescription charge in 1996 helped to contain demand. It is assumed, however, that the total number of prescriptions, including over-the-counter (OTC) products, has continued to rise. In 1998, the number of prescriptions paid for by the social health insurance funds rose significantly (+5% versus 1997) once again (*20*). Between 1990 and 1996, expenditure on pharmaceuticals rose slightly faster than total expenditure by health insurance funds. In addition, spending on pharmaceuticals grew 1% faster than the average annual growth rate of health spending. This disproportionate development is explained by the fact that the number of prescription drugs as well as the number of pharmaceuticals on the positive list has fallen, while the average "price" per prescription has increased. This above-average rise in spending is explained by the increased use of innovative and therefore more expensive drugs (*21*). In 1998, the cost of pharmaceuticals surged once again (+12% growth compared to total spending by health insurance funds) (*20*).

Overall, about three quarters of all pharmaceuticals sold are paid for by the social insurance funds. In 1998, pharmaceuticals accounted for about one fifth of total spending by health insurance funds and 15% of total health expenditure. Despite strict and far-reaching regulation of the pharmaceutical sector in Austria, and continuously increasing co-payments, the rates of expenditure growth borne by the health insurance funds in this sector remain substantial. In fact, growth rates in pharmaceutical expenditure are not expected to decline in future. This trend is driven by exogenous factors and needs to be counteracted by increased monitoring of prescribing behaviour.

Health technology assessment

Four categories can be discerned in this area, of which planning for high-technology medical equipment and transplantation medicine qualify as health technology assessment only in the widest sense. It is to be expected, however,

that this area will provide some impetus for further development in health technology assessment in Austria.

High-technology medical equipment

The high-technology investment plan (GGP) has been integrated into the Austrian hospitals plan (ÖKAP) since 1997 and, in the widest sense, forms part of health technology assessment. Planning is demand-driven rather than cost-benefit-oriented. The key principles underlying planning are structural quality and equity in the delivery of services. The principle of cost-effectiveness is taken into account in drawing up recommendations regarding the location of major medical equipment items which includes equipment already being operated by independent doctors in their practices. The plan is subject to ongoing review.

Compared with other OECD countries, the Austrian population enjoys an above-average availability of high-technology equipment in the areas of MRI

Table 24. High-technology equipment

	1998		2000	
	Acute hospitals (total)	Rehabilitation centres and outpatient facilities	Acute hospitals (total)	Rehabilitation centres and outpatient facilities
Computed tomography scanners	126	82	131	77
Magnetic resonance scanners	38	30	49	39
DSA units	69	3	69	12
Cardiac catheter unit	26	4	28	5
Shockwave lithotripters	12	1	13	1
Supervoltage radiotherapy units	33	0	34	0
Emission computed tomography scanners	105	22	81	23
PET (positron emission tomography) scanners	3	0	9	0

Source: Austrian hospitals and high-technology investment plan 1999.

technology, computed tomography, and radiation equipment (*1,22*). The Austrian high-technology investment plan, agreed between the federal government and the states, formed part of the agreement on the reform of the health care system and hospital financing for the period 1997 to 2000. Table 24 shows high-technology equipment operated by hospitals including rehabilitation centres and outpatient health care services in 1998 and 2000.

Transplantation coordination office – ÖBIGTransplant

Set up in 1990, this facility promotes the management of organs and tissues in Austria, supporting the exchange of information and data among existing centres, intensifying public relations work and, most importantly, documenting transplantation cases in Austria. By issuing transplantation reports to Austrian hospitals at regular intervals it seeks to disseminate internationally agreed "allocation rules" for organs. In addition, an initiative has been started under which one person is to be nominated in each hospital to represent the hospital's interests in the field of transplantation. These nominees are also invited to attend workshops.

The Austrian Federal Institute for Health Care (ÖBIG)

The Federal Ministry for Social Security and Generations promotes the development of expertise in the areas of health technology assessment and evidence-based medicine at the Austrian Federal Institute for Health Care (ÖBIG) as a basis for a systematic assessment of medical procedures in preventive medicine, pharmaceuticals and medical products.

Health technology assessment (HTA), in the narrower sense, is performed at the Institute for Technology Assessment. In the past, HTA has not been accorded particular importance in Austria, due in part to the dual funding scheme for hospitals (see the section on *Payment of hospitals)*.

Financial resource allocation

Flows of funds in the Austrian health system are very difficult to quantify, given the regulatory environment (indirect administration by the federal government) and the fiscal equalization system operated by the federal government and the Länder. Public health funding is raised primarily through contributions and taxes (about 70%). Private revenue sources finance about 30% of expenditure. In recent years, cost-sharing and patient co-payments have become increasingly important sources of financing.

Third-party budget setting and resource allocation

According to Austria's national accounts, 15.71 billion[16] Euro (ATS 216.2 billion) were spent on health in 1998. Because of the large number of players in the Austrian health system, an exact definition of the sources of finance is neither possible on the supply side nor on the demand side. The flows of payments shown in Fig. 15 basically illustrate consumption flows and provide only some indications as to the underlying funding patterns. All data relate to the current system of financial management. Within the public sector, social insurance is the major purchaser, funding about 70% of public expenditure on health; the Länder and local authorities contribute about 20%, and the federal government 0.5% (see Table 6a and Table 6b).

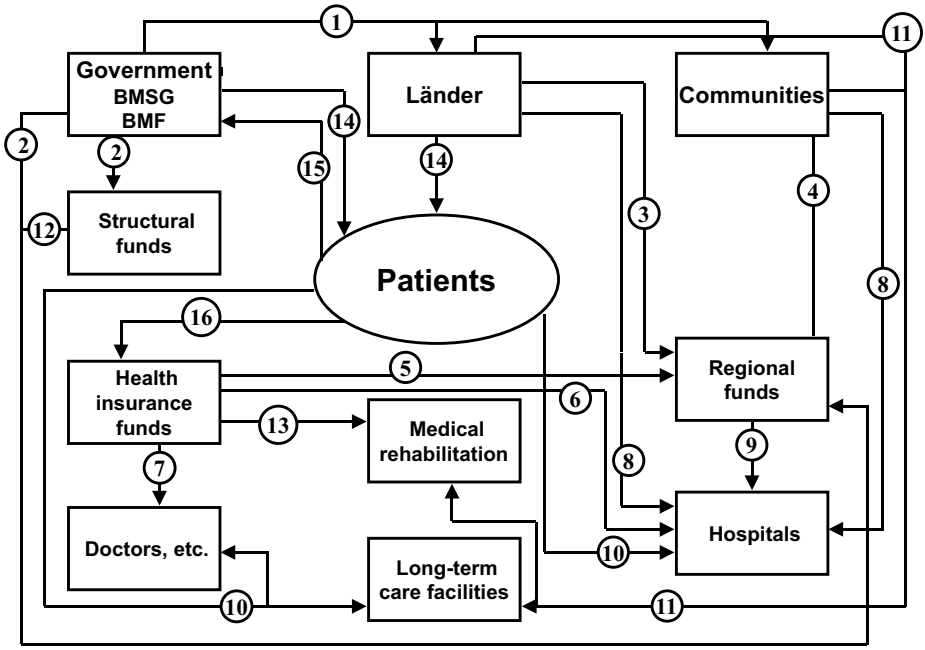
The budget-setting process for the hospital sector will be described in more detail below as firstly, it is the largest health care sector and secondly, health care reform has led to major changes in the institutional framework and flows of funds in this sector (see the sections on *Organizational structure and management* and *Health care reforms*).

The 1998 federal budget allocated Euro 821.2 million (ATS 11.3 billion) for health care. The federal government's budget thus represented about 5.2%

[16] In this document, one billion = 1000 millions

of public expenditure on health. The federal government seeks to use these funds to control activities in the hospitals sector and, thus, the health care system in general. About half of public expenditure on health in Austria goes to the hospital sector. In setting budgets for hospitals, the federal government and the social insurance funds, which together fund about half of hospital expenditure, have to deal with the Länder, local authorities and private hospital owners. Under the distribution of powers laid down in the federal constitution, the federal government's authority is limited to the regulatory functions (see the section on *Organizational structure and management*).

Fig. 15. Flows of funds in the health care system



Source: IHS HealthEcon 2000, *BMSG* 2000.

Notes:
1. Fiscal equalization between the federal government and the Länder
2. Federal government funds under the current agreement pursuant to Art. 15a B-VG
   a) ATS 1.75 billion to structural fund
   b) 1.416% of the respective year's VAT after deduction of the amount pursuant to section 7 para 2(2) of *FAG* (Fiscal Equalization Act) 1997
3. Funds contributed by the Länder to Länder funds
   a) 0.949% of the respective year's VAT tax revenues after deduction of the amount pursuant to section 7 para 2(2) of *FAG* 1997
   b) some Länder pay, in addition, their share towards operational deficits (section 34 KAG) to the Länder funds or route funds from the Länder funds to the Länder for administration by the respective state's government

4. Funds contributed by local authorities to the Länder funds
   a) 0.642% of the respective year's VAT tax revenues after deduction of the amount pursuant to section 7 para 2(2) of FAG 1997
   b) some Länder funds receive the local authorities' share towards coverage of operational deficit (section 34 KAG)
5. Funds contributed by social insurance funds under the current agreement pursuant to Art. 15a B-VG (flat rate based on percent rates defined in B-KAG as amended by Federal Law Gazette No. 853/1995, index-linked, approx. ATS 40 billion in 2000)
6. Funds flowing from social insurance direct to hospitals
   a) hospitals not funded through Länder funds but under agreements subject to private law
   b) certain services provided by fund hospitals that are not paid through the Länder funds but direct from the social insurance funds (e.g. examinations under the mother-child passport)
7. Funds from social insurers for services provided by outpatient contract partners (e.g. general/specialist practitioners, pharmacies)
8. Funds flowing from Länder or local authorities direct to hospitals
   a) funds to cover operating losses not allocated through the Länder funds
   b) funds from Länder or local authorities in their capacity as hospital owners where such funds are not provided through the Länder funds (any losses remaining after the coverage of operational deficits, employees' salaries)
9. Performance-oriented hospital financing (LKF) through the Länder funds; some investment promotion and equalization funds
10. Co-payments, patient deductibles, payments by private health insurance
11. Grants from Länder or local authorities
12. Funds flowing from the structural fund to the Länder funds under the agreement pursuant to Art. 15a B-VG in the amount of approx. ATS 1.69 billion per year
13. Payments made by social insurance funds, cost of operating their own facilities
14. Long-term care benefits paid by the federal government or the states
15. Taxes
16. Social insurance contributions.

The federal government and the states conduct periodic negotiations on intergovernmental transfers. The aggregate budget for the hospitals, which is financed by the health insurance funds, the Länder, the local authorities and the federal government, is negotiated every time the agreement between the federal government and the states is updated (Art. 15a B-VG, agreement on the reform of health services and hospital financing). The last such agreement was concluded in 1997 for a period of four years. This 1997 agreement, the key clauses of which provided the basis for a reform of hospital financing, effectively created the framework conditions for establishing global budget control over the largest segment of health services and integrating all bodies allocating funds to the health system.

The Federal Hospitals Act (B-KAG) calls on the states to provide hospital services. Under the 1948 Fiscal Administration Acts, the states are obliged to pay for the cost of establishing and maintaining adequate hospitals. In addition, the B-KAG provides that the states, as well as local authorities and hospital owners, shall contribute funds towards the hospitals' recurrent costs (section 34 B-KAG). Health insurance funds spend about one third of the contributions

collected on public hospital services for insured persons and their dependants. In 1998, this expenditure item amounted to some Euro 2.69 billion (ATS 37 billion), and in 1999 Euro 2.81 billion (*20*).

Payment of hospitals

Since 1997, slightly less than three quarters of the services provided by hospitals have been paid for under prospective arrangements. Some 30% are billed retrospectively, based on daily rates. Daily rates are charged, for example, for psychiatric patients in day-care facilities.

Table 25 illustrates how funds are allocated to public sector hospitals. The amounts shown are the minimum funds managed by the Länder funds. These monies are allocated to the Länder funds in accordance with defined quotas and various instalments. The Länder may allocate additional resources to these funds under their respective state regulations.

In the year 2000, 6.1% of federal funds came from VAT revenues, 6.9% were paid by the Länder (4.1%) and local governments (2.8%) from VAT revenues. Combined with additional lump-sum contributions made by the federal government, a total of Euro 465.5 million (ATS 6.407 billion) or 12.8% of total hospital funding came from the federal budget. 3.5% of the annual budget went to the structural fund. After deduction of a number of flat-rate amounts, including ATS 30 million for basic services and planning activities, the remaining balance was distributed to the Länder funds in accordance with defined quotas.

In the year 2000, social health insurance contributed some Euro 2.9 billion (ATS 40 billion) to public hospital funding. This was equivalent to about four fifths of the funds revenues shown in Table 25. Due to index-linking, the amount rose from ATS 37 billion in 1997 to ATS 40 billion in 2000. This amount comprises compensation for the cost of patients' hospital stays and all services provided by the hospitals' outpatient departments. This budget is set prospectively and rises with increases in the contributions collected[17] (income-oriented spending policy). In 1998, 30% of social health insurance revenues were spent on hospital services. In 1998, social insurance financing of hospitals thus amounted to about 1.5% of gross domestic product.

[17] As set out in Article 9 (6) of 382 of the annexes to the stenographic records of the Lower House, 49th session, XXth legislative period, 29 Nov. 1996 – "The final statements of expenditure for the years 1998, 1999 and 2000 shall be prepared by 31 October of each subsequent calendar year so that the final annual amount of each preceding year is increased by the percent rate by which the revenues collected by the health insurance funds have increased compared with the respective preceding year".

The minimum level of financing to be allocated to the Länder funds in 2000 was Euro 3.64 billion (ATS 50 billion). Additional expenditure on teaching hospitals comprises of resources allocated by the federal government for construction and expansion projects to those public hospitals that also serve the medical faculties of Vienna, Graz and Innsbruck as teaching hospitals. The sum total is therefore ATS 55 billion, or 2% of the 1998 gross domestic product. This financing scheme covers about half of all hospitals, which provide some 70% of beds and employ 85% of hospital personnel (fund hospitals). This amount represents about 50% of fund hospitals' expenditure. The Länder, the local governments and/or the hospital owners contribute the other half.

There is a large variety of financing systems in Austria due to the autonomy allowed under state laws and regulations. Less than half of the funds required for hospital financing across Austria are allocated through Länder funds (*24*). In five Länder resources provided by owners are pooled in the Länder funds and hospitals are financed exclusively from these. Nonetheless, any deficits are still funded by the respective owner. In two Länder, the hospital owner's share of funding is separate from the Länder funds. In the two remaining states, part of the owner's funds are paid into the Länder funds and the balance is allocated externally. In all Länder investment expenditure and operating expenses are handled separately, as a matter of principle.

Table 25. Hospital financing from 1997 – sources of finance (minimum financing at disposal of Länder funds in ATS millions)

	% share of total value added tax	1997	1998	1999[a]	2000[a]	% share of aggregate hospital financing 2000
Contributions by federal government		6 119	6 185	6 333	6 407	12.8
	1.416	2 788	2 855	3 003	3 077	6.1
a) flat amount to date (Art. 8/1/2)		330	330	330	330	0.7
b) flat amount, additional (Art. 8/1/3)		1 250	1 250	1 250	1 250	2.5
c) flat amount, additional (Art. 8/1/4)		1 750	1 750	1 750	1 750	3.5
Länder	0.949	1 869	1 913	2 013	2 062	4.1
Local governments	0.642	1 264	1 294	1 362	1 395	2.8
Social insurance		36 923	37 892	39 230	40 235	80.3
a) flat amount		36 503	37 467	38 800	39 800	
b) co-payments, estimate		420	425	430	435	
Total		46 245	47 284	48 938	50 099	100.0
Federal government (teaching hospitals)		4 176	4 068	4 548	5 000	
Total		50 421	51 352	53 486	55 099	

Sources: HVSV, Federal Ministry of Finance, IHS HealthEcon 2000.

Note: [a] preliminary estimates.

Funding for privately owned hospitals that are operated for profit is subject to separate social insurance regulations. In 1997, these hospitals were allocated a budget of Euro 65.41 million (ATS 900 million). This amount was also budgeted prospectively. Overall, expenditure for Austrian hospitals account for slightly less than 50% of total health spending (see Table 20).

Performance-oriented hospital financing system (LKF)

Under the performance-oriented hospital financing system (LKF) – a modified diagnosis related groups system – payments are based on flat per-case fees, which allows billing on the basis of actual services rendered by the fund hospitals. The current system of billing for inpatient services comprises two different areas of finance: the LKF core system and the LKF fund control system.

Within the LKF core system, a nationwide uniform number of points is allocated to performance-oriented diagnosis-related groups, with special rules applying to hospital stays below and above certain thresholds, stays in intensive care units, acute neurological follow-up care, geriatric care and intermediate psychiatric care. The number of standard points per case is determined on the basis of hospital stays and costs calculated for some 500 000 patients in 20 reference hospitals.

The LKF core system has been developed continuously and updated since 1997 on the basis of practical experience and revised at annual intervals. The definition of the LKF core system is adopted in the autumn of each year by the Structural Commission. Revisions take effect in January of the subsequent year.

Table 26. Performance-oriented hospital financing system

LKF core system applied nationwide	Allocation of points on the basis of performance-oriented diagnostic-related groups (LDF) including the allocation of points under special regulations per hospital stay
LKF fund control system adjustable by Länder	Taking into account Länder-specific requirements, the following additional criteria may be considered within the LKF system: Type of hospital Staffing Medical equipment State of repair of hospital buildings Capacity utilization Quality of accommodation

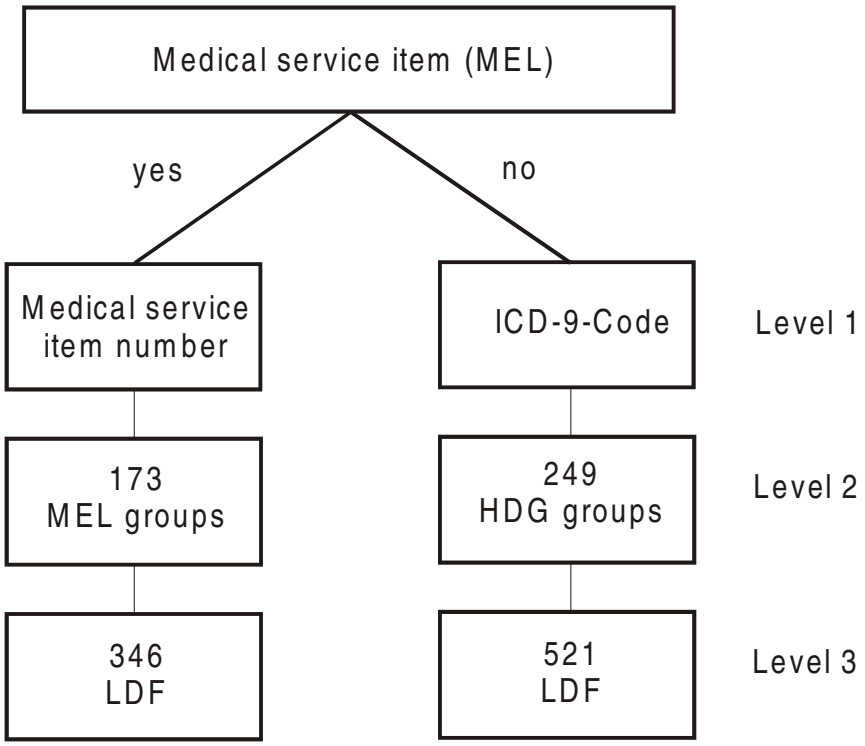
Source: BMGS 1999.

The LKF fund control system can be modified to meet each state's needs and, as shown in Table 26, permits the recognition of specific supply side factors.

Nationwide implementation of the LKF core system

The individual performance-oriented diagnosis-related groups have been defined using a tree algorithm incorporating medical, economic and statistical criteria. As shown in Fig. 16, this algorithm is composed of three levels:

Fig. 16. Flows of funds in the health care system



ICD international classification of diseases
HDG principal diagnosis group
LDF performance-oriented diagnosis-related groups
MEL medical service item

Source: Performance-oriented hospital financing – LKF – System description 2000.

At level 1, the sample of patients from the reference hospitals were divided according to services provided and according to the principal diagnosis. The categorization by services was determined on the basis of those surgical interventions listed in the catalogue of services and a small number of other non-surgical treatments.

At level 2, the homogeneity of services provided and the relationship between services, i.e. the principal diagnoses, were taken into account as well as the homogeneity of costs within statistically significant groups.

Overall, 867 performance-oriented diagnosis-related groups (LDF) were identified. The LDF points per diagnostic group (LDF flat rate) represent the median of the costs calculated for all patients in an LDF.

Each LDF flat rate consists of an activity-related component and a daily charge component. For intensive care units, separate surcharges per day have been calculated. The activity related component is based on the costs determined in the reference hospitals and allocated to patients for specific medical service items. Costs that could not be allocated to specific services, with the exception of the costs of intensive care units, are combined into the daily charge component, which depends on the length of the hospital stay. For each LDF, an upper and a lower limit were defined for hospital stays. For the medical service item (MEL) groups, these limits were determined using patients within an 80% interval of all patients; for principal diagnosis groups (HDG), using patients within a 60% interval. For patients whose stay was shorter than the lower threshold of the average length of stay of their respective diagnostic group, a reduced rate was calculated based on the actual length of their hospital stay. For patients whose length of stay exceeded the limit, additional points were added for each additional day on a declining scale.

In the course of recent revisions, some re-weighting was carried out in the core system by reducing the daily component and adjusting the length-of-stay intervals. Because of the continuous adjustment of this scoring procedure, services provided before 1999 are not always comparable in some sectors. The biggest problem areas are intensive care and, specifically, the definition of care levels in intensive care. However, services were expected to be fully comparable in the 1999/2000 period.

The federal government is interested in enforcing certain standards. Its principal focus in this regard is on the harmonization of charging for services as well as on the continued application of flat per-case fees. Hospitals are obliged to introduce ICD-10 diagnostic codes and an international classification code for medical procedures.

Other activities pursued by the Structural Commission include proposals for the updating of cost type/cost centre accounting in the fund hospitals and the review of available options for developing the system further to include cost unit accounting.

To ensure full transparency and unified control of the provision of hospital services, the application of the performance-oriented flat-rate compensation system for outpatient care settings will be necessary in the future (see the section on *Hospital outpatient departments*).

Documentation and data quality

Since 1989, all hospitals have been required to record inpatients' diagnoses in accordance with ICD-9. Since 1997, they are obliged to record and report medical service items. From January 2000, hospitals have been able to record diagnoses according to the ICD-9 BMAGS 1998 system and measure services using the latest updated version of the BMAGS 2000 catalogue of services.

Since 1997, the Federal Act on Public Health Documentation has served as the regulatory basis for documenting diagnoses and services. To ensure uniform documentation standards across Austria, guidelines are issued in the form of manuals. Under the Länder's relevant regulations, the fund hospitals have to submit to the state or the state's fund monthly reports on diagnoses and services provided as a basis for performance-oriented billing.

Reports on diagnoses and services provided contain administrative, medical and LKF data. The provision of an organization and data processing manual and medical plausibility tests have been established as measures of data quality assurance *(25)*.

Payment of health professionals

Most health insurance agencies pay for primary care services provided to insured persons under a mixed compensation system of flat rates (remuneration for basic services) and fee-for-service payments. Doctors' services are charged on the basis of a system of vouchers (Krankenschein). Health insurance vouchers are issued by employers and serve as evidence that a person is entitled to receive medical services and as a basis for charging doctors' fees to the appropriate social health insurance fund. The fees charged by contract doctors are billed to the general funds (i.e. the 9 regional health insurance funds, 10 company health

insurance funds, the health insurance fund of Austrian miners, the social insurance institution for farmers and the social insurance institution for the self-employed) on a quarterly basis. All other health insurance funds settle accounts on a monthly basis. The ceilings on what can be charged vary by state.

For the large majority of insured people, a flat rate is paid for three-month periods at a time, regardless of how often services are required. The amount of the flat payment varies by specialty and state. The fee per health insurance voucher paid to general practitioners by general funds averaged Euro 36.70 (ATS 505) in 1998. This fee per health insurance voucher comprises several items. About 22% of this amount is flat per-case fees, 28% are basic practice allowances, 20% fees-for-service, and 14% for home visits. The balance is accounted for by flat rates for on-call duty, mileage charges, the cost of substitutions, mother-child passport examinations, home care services and health check-ups. In 1998, practitioners under contract with the social health insurance funds received payments of between Euro 50.87 and 72.67 (ATS 700 and 1000) per patient per quarter.

In some states, the remuneration for basic services is based on a declining scale and depends on the number of vouchers presented per practitioner and per accounting period. This measure is designed to ensure more equity in distributing funds among practitioners within the constraints set by the budget. In one state, Vorarlberg, the health insurance fund allocates a fixed percentage of revenue, earmarked for primary and outpatient care, to the state physicians association. The association was responsible for reimbursing individual doctors according to an established point value system for each voucher. The reimbursement value of the point would vary depending on the size of the budget allocated and the total number of vouchers presented during the accounting period. Doctors thus share the risk the insurance funds face due to fluctuations in the labour market and contribution revenue. A similar model has been established recently in another state.

Some health insurance funds provide remuneration for medical services exclusively on a fee-for-service basis and are billed on a monthly basis.

Remuneration rates are fixed in regular negotiations between the health insurance funds and Länder doctors' associations. Both the health insurance funds and the doctors' associations calculate the costs of new services and negotiate rate adjustments. The most controversial points in these negotiations are generally the time charged per consultation and equipment utilization. If no agreement is reached, the region concerned faces a period with no valid contracts. Disputes about the application and interpretation of contracts are

referred to courts of arbitration. Overall, there has been a trend towards fee-for-service remuneration for practising doctors in recent years.

A problem that is frequently mentioned in connection with the existing system of remuneration is quality assurance including monitoring of process and outcome quality. A frequent subject of discussions with a view to the assurance of structural quality is accessibility of doctors' practices. Even though the doctors' associations consider the elimination of fixed budgets and the gradual expansion of fee-for-service remuneration a step in the right direction, they keep emphasising that general/specialist practitioners do not consider the present situation to be very satisfactory.

The relative income of doctors is high compared to other self-employed workers. Male doctors' incomes are on average ATS 1.2 million which is 143% above the average income among the self-employed. Female doctors' incomes are on average ATS 478 000, which is 90% above the average (26).

Operating expenses for doctors' practices depend on their field of specialization and average 50% of turnover.[18]

People insured under the General Social Security Act (ASVG) are entitled to benefits in kind. Those covered by special funds usually pay 20% of the cost of services received. Special rules also apply to those covered by social insurance funds for the self-employed. Under this scheme, services are charged by the physician to the health insurance fund (costs are reimbursed to the service provider). When a person covered by social insurance consults a doctor who is not under contract with the social insurance fund, the patient pays the bill and then claims reimbursement. Up to 1996, the cost of consultations of such "private doctors" (i.e. non-contracted) was reimbursed at the rates agreed with contract doctors which, depending on the specialty, are about one third of the fees paid by private health insurance companies for the same services. Now, patients are refunded 80% of the rates agreed with contract doctors. People with private health insurance coverage may also submit their bills for reimbursement. Patients have to apply for a refund of fees at the agreed rates.

In 1999, social health insurance funds spent about Euro 2.384 billion (ATS 32.8 billion) on primary care. This amount was over 80% higher than in 1980 and 4% higher than in 1997. Including the cost of dental treatment and dental prosthetic work, spending on primary care doctors accounted for 25% of the entire social health insurance budget. Some of the self-employed primary care physicians, particularly specialists, also work as salaried employees. Six out of ten specialists run a practice of their own.

[18] Information from personal communication with the Federation of Austrian Social Security Institutions and the doctors' associations.

The majority of other health professionals are employed on a salary in accordance with the salary scale in force in their respective state. Some of the employees in non-medical health service jobs are civil servants. Health care professionals other than medical doctors are also allowed to work in private practice in addition to their salaried employment.

Health care reforms

Aims and objectives

In early 1997, a comprehensive package of health care reform measures took effect. These were built on the political principles of equal access to health services, health insurance based on solidarity, mixed financing from contributions and general taxation revenues, and the public delivery of health services. The aim of the reform was to keep the health care system financially viable without compromising equity and solidarity. As the reforms are implemented, the delivery of efficient and cost-effective health services is to be combined with measures designed to assure and further develop quality of service (*27*). The list below outlines the principal reform measures that have been implemented as well as the initiatives that have been taken since the early 1990s which represent a significant component of the long-term strategy for public health services.

Reforms and legislation

New agreement between the federal government and the Länder (1997–2000)

Recent working agreements reached between the coalition parties in government have identified a number of objectives which are relevant for the future development of hospital services, in particular expenditure trends. In late 1996, the federal government and the Länder entered into an agreement pursuant to Article 15a of the Austrian Constitution (B-VG) on the reform of the health care system and hospital financing for the years 1997 to 2000. Specifically, the agreement provides for:

- the introduction of performance-oriented hospital financing, for which the hospitals cooperation fund (KRAZAF) had already done some preparation;
- the abolition of the KRAZAF and the establishment of a structural fund and nine Länder funds as well as a federal government Structural Commission and nine Länder commissions.[19]
  - Members of the Structural Commission include representatives of the federal government, the Länder commissions, the social insurance funds, representatives of municipalities and other local authorities, and representatives of hospitals operated by church organizations. The federal government holds a majority of the votes. The Structural Commission has yet to adopt its own procedural rules.
    - Responsibilities of the Structural Commission:

    1. further development of the health care system;
    2. further development of performance-oriented financing covering all health care sectors;
    3. further development of the Austrian hospitals plan (including the high-technology investment plan) into a Austrian health plan;
    4. quality assurance including the review of services financed under the LKF system;
    5. drawing up principles to guide the use of structural fund resources;
    6. definition of an ambulatory services plan taking into account services provided by general practitioners and specialists;
    7. resolution of supraregional issues arising from the implementation of the Austrian hospitals plan;
    8. administration of the sanctions mechanism.

  - The Länder commissions comprise Länder representatives, representatives of municipalities and other local authorities, the legal entity operating the hospitals named in Article 2, the social insurance funds and the federal government. In the Länder commissions, the states have the majority of votes. Each state's commission has yet to adopt its own procedural rules.
    - Responsibilities of the Länder commissions:

    1. administration of the sanctions mechanism at Länder level;
    2. arbitrating in matters concerning the interpretation of the state's hospitals plan (regarding services);

[19] According to 382 of annexes to the stenographic records of the Lower House, 49th session, XXth legislative period, 29 November 1996.

3. limiting private practice of doctors who are employed in hospitals;
4. coordination of services between hospitals in light of the services available at the supraregional level;
5. adjustment of performance-oriented hospital financing to each state's specific needs;
6. setting budgets for hospital owners where this is required under state legislation.

- Development and definition, by mutual agreement, of an Austrian health plan comprising the Austrian hospitals plan including the high-technology investment plan, a hospital outpatient services plan, a location plan for contract doctors, a plan for nursing care, and a rehabilitation plan.
- Establishment of a consultative mechanism between the social health insurers and the Länder to address the financial consequences of structural changes and regulate changes in the services offered by hospitals, day-care centres, day clinics, ambulatory services and practitioners.
- Establishment of a sanctions mechanism: in the event of significant violations of mutually agreed plans, the state's share of federal funds will be withheld until the state's fund or the state itself has taken appropriate measures against the hospitals to re-establish compliance with the plan.
- Establishment of budgets by health insurance funds for hospital financing. The payments made by social insurance funds to the Länder funds rise with increases in the contributions collected by the health insurance funds ("revenue-driven spending policy").

The Austrian health plan

One of the targets named in the government's policy statement of January 1990 is "the development of a national health plan in conjunction with the Länder and with the cooperation of the social insurance funds, specifically including a hospitals plan and a high-technology investment plan". The Austrian health plan is designed to ensure structural quality and to optimize the interactions within the public health system.

As part of the statutory agreements entered into by the federal government and the Länder, a binding Austrian hospitals plan (ÖKAP) including a high-technology investment plan (GGP) was agreed and came into effect on 1 January 1997. The plan is binding on about half of the hospitals in Austria. It covers all those public and private non-profit hospitals which were previously subsidized by KRAZAF, the hospitals cooperation fund. These hospitals (the so-called

fund hospitals) manage about 70% of all hospital beds and employ slightly more than 80% of all hospital staff.

The hospitals plan lays down the location of hospitals, the range of specialties offered, and the total number of beds per hospital. It also specifies the maximum number of beds per specialty per Land. Among the key objectives to be considered in any change to the structure of inpatient services are the following points:

- Inpatient acute care is to be provided by efficient, needs-driven hospitals offering a mutually coordinated range of services (planning of service levels).
- Acute hospitals are to provide the Austrian population with evenly distributed and easily accessible services which guarantee sound medical and financial standards (efficiency and effectiveness).
- The reliance on hospitals covered by the hospital plan is to be decreased on a sustainable basis by shifting services to outpatient, intermediate and rehabilitation facilities. The length and frequency of hospitalization is to be reduced to what is essential from a medical viewpoint (capacity adjustment).
- Shifting services away from acute hospitals is to be made possible by the development of ambulatory and intermediate (day) facilities. Day clinics are to be set up only in locations where organizational arrangements with hospitals are in place offering easily accessible inpatient care in the particular specialty.
- High-technology medical equipment should be installed only in hospitals where such equipment is required to meet medical needs arising in connection with the specialties offered (criterion of structural quality).
- In order to provide the best service to the public, the sites where high-technology medical equipment is located should be optimized in terms of regional distribution and ease of access (criterion of equitable delivery of services) as well as cost effectiveness (criterion of economic efficiency).

Planning is based on demographic aspects, developments in medical science, hospital occupancy, geographical structure, and the function of hospitals as providers of services. Participants in the planning process include medical experts as well as experts from the Länder governments, hospital operators, and the doctors' association. Plans are agreed by the federal government and the Länder and the rules laid down in the hospital plan are binding. In cases of non-compliance with given standards, the federal government (through its structural fund) may suspend funds to the Länder for hospital financing. The continuous adjustment and evaluation of the hospital plan and its future development into a health plan is part of the planning process at the federal level.

Revision of the high-technology investment plan (GGP)

In June 1997, the high-technology investment plan underwent its first revision. This revised plan:

- provides recommendations about the location and type of high-technology medical equipment to be installed in "fund hospitals";
- takes into account the equipment available at "non-fund hospitals" and in the primary care sector (e.g. doctors' practices and equipment-sharing groups);
- provides recommendations regarding equipment ownership by "non-fund hospitals" and the primary care sector , taking into account the maximum number of high-technology equipment units operated in practices run by contract doctors. In awarding contracts, the social insurance funds must adhere to the recommendations made.

Revision of ÖKAP/GGP

January 1999 saw a revision of ÖKAP/GGP (hospitals and high-technology investment plans) in response to shifts in the age composition of the population and the associated health problems to be dealt with by acute medical care. For the first time, services were included in the plan that had not been covered before, such as acute geriatric, hospice and psychiatry services.

- The hospitals plan makes provision for 57 new hospital locations with a total of 2000 beds for acute geriatric cases until the year 2005. This is to be achieved by reallocating hospital beds now used by other specialties, meaning that the total number of hospital beds of 51 027 will not be increased. These new service units are designed to prevent or delay the need for long-term nursing care by helping elderly patients to get active and mobile again. Another priority is to assist patients in regaining their independence so they can return to live in their own homes.
- Hospice wards are to offer advanced palliative medicine, pain therapy, nursing care and psychosocial support.
- The inclusion of psychiatric services into the plan marks the first-ever policy of adopting uniform psychiatric services across Austria. Guidelines were created for the reform and further development of psychiatric care for inpatients and outpatients. The care facilities which were formerly concentrated in large specialized psychiatric hospitals will be decentralized. Psychiatric care units will be set up at 19 new locations, with these new psychiatric departments being established at acute general hospitals and thus integrated into standard services on a par with other specialties.

The Länder are required to implement the agreements laid down in the ÖKAP/GGP in their respective state hospital plans. The agreement pursuant to Article 15a of the constitution on the reform of health care and hospital financing expired at the end of December 2000. Moreover, the government policy statement of February 2000 defines that the restructuring of the rehabilitation services provided by various branches of social insurance will begin through the establishment of a joint umbrella organization for the various social insurance institutions.

Reorganization of funding for long-term care

In 1993, a new and comprehensive system of long-term care benefits was implemented for patients in need of permanent care. It created a system of categorized needs-oriented long-term care benefits, to which beneficiaries are entitled regardless of income, personal wealth or the cause of their disability (see the section on *Social care*). This closed a gap within the social security system.

Health promotion

The Health Promotion Act, which was passed in 1998**,** introduced new developments in the area of health promotion in Austria, which were designed to provide a sound basis for existing initiatives and projects and their long-term efficacy. From 1998, Euro 7 267 442 (ATS 100 million) will be allocated each year for health-promotion measures, information about healthy lifestyles, education on health hazards and the development of healthy lifestyles. The administration and implementation of programmes has been entrusted to the "Healthy Austria Fund", whose governing body represents all those involved in Austria's health system. The "Programme for Better Health in Austria" launched in February 2000 called for a working group on preventative medicine to be set up in each of Austria's states.

Quality assurance

Quality assurance is an important pillar of the health care reform that took effect in 1997 and is the explicit responsibility of the Structural Commission. At the federal level, the objective is to further develop a quality assurance system that can be implemented at all levels of care and which integrates all health system partners including staff and patients (*26*). The Federal Ministry for Social Security and Generations supports health care facilities by providing resources for pilot projects and practical assistance in carrying out quality improvement measures.

In addition to a number of pilot projects already under way (*5,26,28*), in 1997 eleven hospitals began collaboration on the most extensive pilot project to date, named "quality in hospitals". This project is designed to intensify and further develop the focus on patients and staff. In addition, it should increase improvements in health status and optimize the use of resources by identifying and comparing both processes and outcomes. Planning and implementation of the first quality improvement measures started in spring 1999. Meanwhile, the pilot has some 230 employees and 62 departments actively involved within the hospitals plus another 3000 people through indirect channels. Best practice models for quality improvement are being developed in admission and discharge management, the cooperation of departments with internal service providers, the organization of operations and patient-oriented ward organization. The insights gained by the participating hospitals throughout the process were to be made available to other facilities providing inpatient care in the form of manuals by the end of 2000.

The project "measuring outcome quality in hospitals" is the first to look at outcomes. This project is designed to develop methods for measuring outcome quality with the development of relevant indicators being patient-oriented. The next step is for these tools to be made available for the purposes of measuring outcomes nationwide.

In addition, a coordinating body has been set up to assist hospitals participating in the quality indicator project. In 1998, six hospitals took part in this project. In the same year, "guidelines for antibiotic use" were drafted and made available to hospitals to assist them in administering antibiotic treatments. Apart from a clear definition of quality standards, the government policy statement in February 2000 also called for the development of basic information for a nationwide performance comparison in the secondary and primary care sectors.

Expanding the number of insured persons

Since January 1998, part-time workers (with a monthly income of up to Euro 278.40/ATS 3830) may make voluntary social insurance contributions in order to establish their entitlements to health insurance and retirement benefits. The new regulation is particularly important for women, many of whom are employed by voluntary/charitable organizations, and also covers people who work under contract. In addition, insurance coverage is provided for self-employed business people who do not have a licence issued by a professional body (called *Gewerbeschein*) and whose annual income is above a defined level.

Hospital reform

As hospitals have to provide services to the public and are owned by public-sector bodies, their organizational set-up has developed within the framework of government administration. This has led to the evolution of highly complex organizational structures. The involvement of political bodies, central administrative departments and hospitals in decision-making processes caused substantial friction and consequentially also to inefficiencies. Therefore, some previously in-house operations including laundry, cleaning and catering services were "outsourced" in the late 1980s and early 1990s.

Some of the Länder increasingly have been pursuing a business-oriented approach and have begun to see hospitals as "enterprises". To give senior managers more decision-making powers, companies were set up under private law, for the combined management of hospitals. This reorganization created a need for a revision of the existing regulatory framework.

Psychotherapy services

A number of amendments to social security legislation confer upon psychotherapy services the same status as medical care provided that the service provider has certain qualifications. Equal status means that psychotherapy is now available to patients as a benefit-in-kind under social health insurance. At the same time, professional standards of treatment based on experience in clinical settings are guaranteed. However, a general agreement between the Federation of Austrian Social Security Institutions and the psychotherapists' professional body has yet to be finalized.

WHO objectives – health for all

For many years, public health polices have been modelled on the health for all framework developed by the WHO Regional Office for Europe.

The BMSG regularly informs all players in the Austrian public health system of WHO objectives. Austria takes part in a number of WHO projects and has adopted and implemented many programmes including, in the field of health promotion, "Health promoting schools", "Healthy cities", "Health promoting hospitals", "Health and work", and "Health in prisons". One of the states, Vorarlberg, is a long-standing member of the CINDI programme (Countrywide Integrated Noncommunicable Diseases Intervention Programme).

Austria also participates actively in projects relating to smoking, alcohol, drugs and infectious diseases including AIDS. National measures are taken in

accordance with WHO objectives (e.g. Alcohol Action Plan, Tobacco Action Plan).

"Programme for better health in Austria"

Among the principles outlined in the federal government's policy statement of February 2000 (New Social Contract) are the objectives of equal access to all medical services, the maintenance of a decentralized health delivery structure, increased use of the primary care sector and more cost efficiency in the health system through an emphasis on the maxim that "prevention is better than cure".

Specifically, priority is to be given to the development of outpatient health care services including better coordination of outpatient services planning between the Länder and social insurance funds. The hospitals' outpatient departments are to be confined to the provision of specialist and emergency services once a fully-fledged primary care system maintained by practising doctors is in place. In addition, group practices are to be established under contracts with social health insurance funds.

The first steps in this direction have already been taken. The Doctors' Act has been reviewed with the aim of creating a legal basis for group practices from 2001. Current plans also provide for the levying of charges for services rendered by hospitals' outpatient departments from 2001. Patients referred by their doctor will have to pay ATS 150 per visit. When patients go to a hospital's outpatient department directly, the charge will be ATS 250, with a limit on total charges per calendar year of ATS 1000.

Conclusions

General assessment of reforms

The most important change in the organizational structure in recent years has occurred in the hospital sector – financing funds have been established as new legal entities and cash flows, decision-making processes and incentives have been restructured.

The options for making rational decisions about resource allocation and capacity control have improved substantially as a result of new voting arrangements under which the federal government now has a majority of votes in the Structural Commission and the Länder in the state (or Länder) commissions.

The combination of budget-setting and performance-based financing of services is an economically viable and timely measure that is also used in many other countries to promote the transparency of service delivery and costs in the hospitals sector. As regional authorities and health insurance funds have been integrated into the funding reform through mechanisms of consultation and sanctions, each state's hospital sector will be subject to global budget control.

On the other hand, the reorganization of funding has caused an "asymmetrical structural shock" as the primary care sector and hospitals' outpatient departments, which play a key role in emergency care and are also very popular with patients, have not been adequately integrated to date. This structural imbalance may have a destabilizing effect on the entire supply chain. The one-sided nature of the reform may lead to a shifting of costs to primary care facilities, including hospitals' outpatient departments, and ultimately onto households (through higher co-payments, rationing, etc.). This may give rise to social costs and/or welfare losses which may eventually outweigh any efficiency gains .

Under the Länder's legislation, the Länder may allocate funds at their own discretion. Apart from the need to provide a minimum level of financing for

hospitals, there are no restrictions on how other resources are spent. As a result, diverse financing systems have evolved in the individual states. This may cancel out any gains won by the transition to diagnosis-based financing, as the freedom to allocate funds may counteract any incentive generated by nationally defined per-case fees.

In the future, emphasis must be on the standardization of reimbursement criteria. Another important impetus in developing the organization of the health care system is the combination of inpatient and outpatient care. For this purpose, group practices would have to be set up, working hours should be made more flexible and the remuneration of general practitioners and specialists adjusted to provide incentives for adapting surgery hours and promoting weekend services and home visits. Some first steps towards the creation of group practices have already been taken (see the section on *Health care reforms*).

The 1996 and 1997 consolidation packages included measures affecting both expenditure and revenues in social and health services with the aim of meeting the budget criteria for EMU membership. The implementation of budgets for hospital care aimed to help social insurance funds to match their expenditure more effectively to the amount of revenues collected. Revenues were raised by increasing prescription charges, introducing a charge per health insurance voucher, and raising the pensioners' contribution rate.

The clear decline in public expenditure indicates that the measures taken to contain costs have been effective and that budget discipline is being adhered to. Beyond that, this development is consistent with the desire to maintain Austria's competitive position or even to strengthen it by reducing labour costs. The persistent resistance on the part of business, policy-makers and the public against a continuous adjustment of health insurance contributions to the level of expenditure has necessitated the introduction or continuation of co-payments, deductibles and cost-sharing. Exceptions and exemptions for low-income earners aim at ensuring continued free access to health care services for everyone.

In the WHO World Health Report 2000 on health systems performance, Austria ranked in ninth place in terms of overall health systems performance. On level of responsiveness it ranked joint twelfth with Australia behind other European countries such as Denmark, Germany, Luxembourg, the Netherlands, Norway, Sweden and Switzerland. The fairness of health care financing (as measured by the share of a household's expenses on health of the capacity of pay) in Austria was assessed as being joint twelfth just behind Finland, Norway and the United Kingdom.

Future development of the health sector

In Austria, the hospitals sector accounts for slightly less than one half of all health care spending. This is slightly above the OECD average. At the same time, Austria has one of the highest hospital admission rates in the EU and OECD. Admission rates remain at a high level while the average length of stay and the number of beds are declining steadily. This development and the Austrian population's comparatively good state of health (*1*) are indicative of substantial productivity gains in hospitals, the qualitative extent of which has not yet been identified empirically. The primary care sector is presumably confronted with the same problem but in that area data are more difficult to obtain and are not collected systematically at federal level.

Given the Länder's relatively large scope for financial autonomy, delegation of financing to the Länder funds may provide an opportunity for a stronger development of horizontally integrated health regions in the Austrian health sector. The Länder funds can play their role as purchasers more effectively as they have freedom over the regional allocation of funding among hospitals, day clinics and outpatient services. The aim should be to integrate the levels at which care is provided and to adjust services in response to needs.

Imbalances in the structure of the supply chain are characterized by the fact that hospitals' outpatient departments, while playing an important role in the provision of primary care, to date have not been included in planning and regulatory activities. The hospitals' outpatient departments are popular with the population, as clustering of diverse specialties saves patients time as well as the need to travel. Furthermore, the hospitals' outpatient departments have been the only continuous structure in the supply chain that provides emergency services both day and night. As the hospitals' outpatient departments are the only area not yet covered by performance-oriented financing, there is an incentive for reducing the volume of services in this sector as much as possible as the price structure is very unfavourable for hospital owners. This will, however, place great pressure on the primary care sector with its still very inflexible office hours. Beyond that, there are some preliminary indications that pressure will be exerted on the inpatient sector as well, as reflected by a rise in day surgery cases. Therefore, financial integration of inpatient and outpatient services is necessary. In addition, the urgent need for horizontal integration is underlined by the change in health problems resulting from the ageing of the population. The aim of introducing charges for outpatients from 2001 was to make the primary care sector more attractive and to provide disincentives for referrals to hospitals (see the section on *Health care reforms*).

Despite the need for budget consolidation, the 1996 government policy statement provided a substantial amount of money, spread out over four years, for supporting the implementation of structural reform and the hospitals plan in the inpatient sector. One of the key measures specified in the statutory agreement between the federal government and the Länder was the establishment of an Austrian health plan. The Structural Commission, in which the federal government holds a majority of votes, seeks to develop the Austrian health plan further and to expand it to cover all health care services. This is done with due consideration being given to the health insurance market and in consultation with the Länder.

These measures are the first steps towards an increased integration of the supply chain. In view of the planned objectives, a centralist approach has been adopted. Overall, more weight is accorded to service planning than to the introduction of planned markets or quasi-markets, even though the creation of the Länder funds has provided a basis for the evolution of decentralized planned markets that might promote integration of the supply chain.

Glossary

English to German

English	German
Act on Active Duty	Kriegsdienstleistungsgesetz
Agricultural Labourers Insurance Act	Landarbeiterversicherungsgesetz
approved list of drugs and therapeutic products (the social insurers' positive list)	Heilmittelverzeichnis
Association of the general workers' health and invalidity relief funds	Verband der Allgemeinen Arbeiter-, Kranken- und Invalidenunterstützungskassen
Austrian Association of Midwives	Österreichisches Hebammengremium
Austrian Economic Chamber	Wirtschaftskammer Österreichs
Austrian Federal Institute for Health Care	Österreichisches Bundesinstitut für Gesundheitswesen (ÖBIG)
Austrian hospitals plan	Österreichischen Krankenanstaltenplan (ÖKAP)
Austrian Medical Association	Österreichische Ärztekammer
Austrian Trade Union Federation	Österreichischer Gewerkschaftsbund
basic law	Grundsatzgesetzgebung
Blue-collar Workers Insurance Act	Arbeiterversicherungsgesetz
emergency hospitals	Unfallkrankenhäuser
civil servants' health and work accident insurance scheme	Beamten-, Kranken- und Unfallversicherung
Civil Servants Health Insurance Act	Beamtenkrankenversicherungsgesetz
Conference of the Presidents of the Chambers of Agriculture	Präsidentenkonferenz der Landwirtschaftskammern
Doctors' Act	Ärztegesetz
Economic and Social Partnership	Die Wirtschafts- und Sozialpartnerschaft
economic stimulation and stability pact	Konjunkturbelebungs- und Stabilitätspakt
Farmers Health Insurance Act	Bauernkrankenversicherungsgesetz
Federal Act Governing Long-term Care Benefits	Bundespflegegesetz
Federal Act on Public Health Documentation	Bundesgesetz über die Dokumentation im Gesundheitswesen

Federal Chamber of Labour	Bundesarbeitskammer
Federal Hospitals Act	Bundes-Krankenanstaltengesetz (B-KAG)
Federal Institute for Medicines	Bundesinstitut für Arzneimittel
Federal Ministry for Agriculture and Forestry, the Environment and Water Management	Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft
Federal Ministry for Economic Affairs and Labour	Bundesministerium für Wirtschaft und Arbeit
Federal Ministry for Social Security and Generations	Bundesministerium für soziale Sicherheit und Generationen (BMSG)
Federal Ministry of Finance	Bundesministerium für Finanzen
Federation of Austrian Social Security Institutions (the umbrella organization of all social insurers)	Hauptverband der österreichischen Sozialversicherungsträger
Fiscal Administration Acts	Finanzverfassungsgesetze
Fiscal Equalization Act	Finanzausgleichsgesetz
fund hospitals	Fondskrankenanstalten
general occupational accident insurance fund	Allgemeine Unfallversicherungsanstalt
General Social Security Act	Allgemeinen Sozialversicherungsgesetz (ASVG)
General University Studies Act	Allgemeines Hochschulstudiengesetz
general workers' health insurance and invalidity relief funds	Allgemeine Arbeiter-, Kranken- und Invalidenunterstützungskasse
head doctor	Chefarzt
health department	Gesundheitsamt
health insurance voucher	Krankenschein
Health Promotion Act	Gesundheitsförderungsgesetz
Healthy Austria Fund	Fonds Gesundes Österreich
high-technology investment plan (for hospital equipment)	Großgeräteplan (GGP)
hospital and high-technology investment plans	Österreichischen Krankenanstalten- und Großgeräteplanes (ÖKAP/GGP)
hospitals cooperation fund	Krankenanstalten-Zusammenarbeitsfonds (KRAZAF)
independent clinics	Ambulatorien
industrial accident and health insurance scheme	Unfall- und Krankenversicherung der Arbeiter
Labour Inspectorate	Arbeitsinspektorrat
Länder Hospitals Act	Landes-Krankenanstaltengesetz (L-KAG)
law on miners' associations	Gesetz über die Bruderladen
location plans	Stellenpläne
Lower House of Parliament (National Council) (MPs elected by popular vote)	Nationalrat
medical service item	medizinische Einzelleistung (MEL)
Medicines Act	Arzneimittelgesetz
medicines price register	Österreichische Arzneitaxe
Midwives Act	Hebammengesetz

Office of the State Government	Amt der Landesregierung
Parity Commission	paritätische Kommission
performance-oriented diagnosis-related groups (LDF)	leistungsorientierte Diagnosefallgruppen
performance-oriented hospital financing	Leistungsorientierte Krankenanstaltenfinanzierung (LKF)
pharmacists' association	Apothekerkammer
Price Act (concerning the price of pharmaceuticals)	Preisgesetz
principal diagnosis groups	Hauptdiagnosegruppe (HDG)
Programme for Better Health in Austria	Programm für mehr Gesundheit in Österreich
state(s)	Land, Länder
state director of health	Landessanitätsdirektor
state health board	Landessanitätsrat
regional health insurance funds	Gebietskrankenkassen
Regulations for Medical Training	Ärzte-Ausbildungsordnung
social insurance fund for farmers	Sozialversicherung der Bauern
social insurance fund for the self-employed	gewerbliche Sozialversicherung
Social Insurance Transition Act	Sozialversicherungsüberleitungsgesetz
Social Security Act for the Self-employed	Gewerbliche Sozialversicherungsgesetz (GSVG)
special class	Sonderklasse
statutory agreements	Staatsverträge
Structural Commission	Strukturkommission
structural funds	Strukturfonds
Supreme Health Board	Oberster Sanitätsrat
Upper House of Parliament (Federal Council) (where the states are represented)	Bundesrat
White-collar Workers Insurance Act	Angestelltenversicherungsgesetz

Abbreviations

ASVG – Allgemeines Sozialversicherungs-gesetz	General Social Security Act (covers the majority of dependent workers)
B-KAG - Bundeskrankenanstaltengesetz	Federal Hospitals Act
BMSG - Bundesministerium für soziale Sicherheit und Generationen	Federal Ministry for Social Security and Generations
B-VG - Bundesverfassungsgesetz	Austrian Constitution
DSA	digital subtraction angiography
ESA	European System of (Integrated National) Accounts
GGP – Großgeräteplan	high-technology investment plan (for hospital equipment)
GP	general practitioner
GSVG – Gewerbliche Sozialversicherungs-gesetz	Social Security Act for the Self-employed
HDG – Hauptdiagnosegruppe	principal diagnosis group
HTA	health (care) technology assessment
HVSV – Hauptverband der österreichen Sozial-versicherungsträger	Federation of Austrian Social Security Institutions
ICD	International Classification of Diseases
KRAZAF – Krankenanstalten-Zusammenarbeitsfonds	hospitals cooperation fund (no longer exists)
LDF – leistungsorientierte Diagnosefallgruppen	performance-oriented diagnosis-related groups
L-KAG – Landeskrankenanstaltengesetz	Länder Hospitals Act
LKF – leistunsorientierte Krankenanstalten-finanzierung	performance-oriented hospital financing system
MEL – medizinische Einzelleistung	medical service item
ÖKAP – Österreichischer Krankenanstaltenplan	(Austrian) hospitals plan

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