

European

Observatory

on Health Care Systems



Health Care Systems in Transition

Czech Republic



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

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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.
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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 Norway and Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine in association with the Open Society Institute. 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>.

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The current series of the 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 Government of Norway, the Government of Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine in association with the Open Society Institute.

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. Administrative support, design and production of the HiTs has been undertaken by a team led by Phyllis Dahl and comprising Myriam Andersen, Sue Gammerman and Anna Maresso. Special thanks are extended to the WHO

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Introduction and historical background

Introductory overview

The Czech Republic is located in the middle of Europe. Covering an area of 78 867 km², it borders Germany to the west, Poland to the north, Slovakia to the east and Austria to the south. At the end of 1998, there were 10.29 million inhabitants, of whom approximately 65% lived in urban areas. The population consists of 94.4% ethnic Czechs, 3% Slovaks, 0.6% Polish and 0.5% German. Both atheists and Roman Catholics account for about 40% each of the population, with other religious affiliations accounting for the remaining 20%.

The western part of the Czech Republic is called Bohemia and the eastern part consists of Moravia and part of former Silesia. Until 1918, these territories were part of the Austro-Hungarian Empire. Following its break-up after the First World War, they joined together with Slovakia to form the state of Czechoslovakia. Czechoslovakia continued to exist until 1938, when it was divided as a result of the Munich Treaty. Bohemia and Moravia were occupied by Germany between 1939 and 1945. Following the end of the Second World War, the Czechoslovak state was restored and the country came under a communist administration in 1948. A short period of liberalization was started in the late 1960s but was ended by Warsaw Pact forces in 1968. The process of democratization began in 1989, leading to democratic elections in 1990. A legal separation of the Czech and Slovak Republics took place in 1992, and the Czech Republic was established on 1 January 1993.

The Czech Republic has been a member of the Organisation for Economic Cooperation and Development (OECD) since December 1995 and a member of the North Atlantic Treaty Organization (NATO) since February 1999. Currently, its main priority is to gain membership in the European Union.

The Czech economy is based on market principles. It has a strong industrial component, a rapidly developing service sector and diversified agriculture. In

Fig. 1. Map of the Czech Republic¹

1997, the gross domestic product (GDP) per capita was US \$5050 (using the exchange rate) or US \$13 088 PPP (purchasing power parity). After a mild recession, GDP is currently increasing again. The unemployment rate was 8.5% in the middle of 1999. Inflation fell from a peak of 56% in 1991 to 9.8% in 1994, after which it has stabilized at around 10% (10.7% in 1998).

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

In 1994, for the first time since 1918, the number of deaths exceeded the number of births by around 10 000. This trend has continued and the population is currently falling by around 1/1000 per year. The population is expected to continue to decline, while the number of people above 65 years of age (14% in 1998) will rise. The main health indicators reflect the Republic's position as one of the healthiest of the central and eastern European countries (CEE). Infant mortality (5.2 per 1000 live births in 1998) and life expectancy (71.1 years for men and 78.1 years for women in 1998) are better than in most CEE countries, but are worse than in western Europe. Diseases of the circulatory system (especially ischaemic heart disease) remain by far the most important causes of death in both men and women, although this has decreased in recent years. However, the standardized death rate in the Czech Republic is still higher and life expectancy at birth is shorter than in any European Union country.

The Czech Republic is a multiparty parliamentary democracy headed by a president (elected for a five-year term). Since independence, Vaclav Havel has been in that position. The constitution provides for a bicameral parliament which is responsible for final decision-making to approve a new legislation (constitution, laws, acts, etc.) proposed by the Czech Government. The 200 members of the House of Representatives are elected for a four-year term, while the 81 members of the Senate are elected for six-year terms. The present government is a minority one and was established by the Czech Social Democratic Party (CSSD) in 1998. Milos Zeman has been the Prime Minister since 17 July 1998. There are four vice-prime ministers who are responsible for inter-ministerial coordination. One of them, the First Vice-Prime Minister who is the Minister of Labour and Social Affairs, is responsible for coordination among the Ministry of Labour and Social Affairs, the Ministry of Health, the Ministry of Education, Youth and Sport, the Ministry of Environment and the Ministry of Culture. Either the First Vice-Prime Minister or the Minister of Health proposes new legislation for the health sector to the parliament. The Minister of Health has changed eight times since 1989.

There are 77 districts in the Czech Republic, varying in size from 43 000 residents (Jesenik) to 1.2 million (Prague). Districts receive most of their budget from the state budget and have little independent tax-raising power. They are not powerful political bodies, as most decisions are taken at state level. There is no regional tier of government yet in the Czech Republic. However, a regional structure dividing the country into 14 regions has legally been introduced on 1 January 2000 (Fig. 2).

Parliament approved the following administrative structure in order to bring Czech legislation into line with that of the European Union:

Fig. 2. Regions from 1 January 2000

- the Czech Republic as a whole
- territorial units as designated by the European Union (8 units)
- regions (14 regions)
- districts (77 districts)
- municipalities/communities.

The Ministry of Internal Affairs is responsible for restructuring state and public administration over the next few years. Once the regional-level administrative structure has been fully implemented (some time after 2003), it is proposed that the district-level administrative structure should be eliminated. The Ministry of Regional Development is also involved in the process of updating state and public administration.

Historical background

Czechoslovakia became independent in 1918 after the First World War, when the first Czechoslovak Republic, the direct predecessor of the present-day Czech Republic (established on 1 January 1993) was constituted. Czech health policies can be dated back to that time. Policy was strongly influenced by the political tradition of the Austro-Hungarian Empire of which the Czech lands were a part until 1918. This comprised a Bismarckian system of social and health insurance.

The first social insurance system was established in 1924. In the first years of independence, a health insurance act was adopted, which provided insurance coverage for employees (more than one third of the inhabitants of the state) in case of illness. Step-by-step, the system of state health insurance was complemented by other forms of insurance and by the work of charities. This system continued to function with few modifications until 1951.

In 1948, shortly after the Second World War, substantial political changes took place in the country. The political system became a “people’s democracy” and the country was governed by communist ideological principles, linked both politically and economically to the former Soviet Union. As a result, the proportion of nationalized property (including various forms of collective ownership) reached nearly 100%. This influenced many institutions, including the health care system.

At that time, two possible systems of health care were considered as models. One was a national insurance system, more or less based on previous tradition; the other was the newly-designed “System of unified state health care”.

In 1948, the first model was implemented, and health and social insurance were unified into a compulsory system of insurance for all citizens. The Central National Insurance Fund was founded, which covered all health care and sickness benefits. Insurance, amounting to 6.8% of wages, was paid entirely by the employer.

Four years later, in January 1952, the centralist system of unified state health care was introduced. The state took over all health care coverage and financed it through taxes. All health care was provided free-of-charge. At the same time, all health care providers were nationalized and subsequently incorporated into regional and district institutes of national health. The Czech part of Czechoslovakia had 8 regions and 75 districts. Every district had a district institute of national health and every region had a regional institute of national health. District institutes of national health consisted of medium or small hospitals, as well as polyclinics and health care centres for ambulatory care, pharmacies,

centres of hygiene, health care centres for the workplace, divisions of emergency and first aid services and nursing schools.

The system proved reasonably effective in dealing with the post-war problems of the early 1950s. During that time, a high infant mortality rate, tuberculosis, other serious infections and malnutrition diminished rapidly. By the beginning of the 1960s, Czechoslovakia had very good health status in international terms.

From the late 1960s, these positive trends reached a turning point. Such a centralist and, in many cases, rigid system was not able to respond to new health problems in a flexible manner, caused mainly by the lifestyle of the population and by the environment. Thus, both the health care system and health status indicators stagnated from the late 1960s to the late 1980s. Temporary political reforms in 1968, when the Federation of the Czech and Slovak Republics was proclaimed, affected the health care system only in as much as they separated the Czech and Slovak parts, creating two separate ministries of health. The health care delivery system itself was unaffected. In 1966, the Law on Health Care for the Population was approved, which is still an existing piece of legislation for the health care system, albeit many changes were applied and approved after 1989.

In 1990 and 1991, in the midst of the democratization process, a dramatic liberalization of the health care system took place. The principle of free choice of health care facility was introduced. The huge regional and district health authorities were dismantled. In 1991, new laws were approved, especially the General Health Insurance Law (Act No. 550/91 Coll.) and the Law on the General Health Insurance Fund (Act No. 551/91 Coll.). Since then, the health care system has moved towards a compulsory social insurance model, with a number of insurers financing health care providers on the basis of contracts. This does not appear to have caused any adverse effects to the health status of the population. For the most part, indicators are showing positive trends.

In the period from 1990 to 1998, life expectancy increased from 67.6 to 71.1 and 75.4 to 78.1 years for men and women, respectively. In the period from 1990 to 1998 infant mortality decreased from 10.8 to 5.2 per 1000 live births. The successful implementation of curative technologies has caused both a declining trend in mortality rates and a growing demand for higher investment in health.

The incidence of tuberculosis (TB) in the Czech Republic has remained at the 1987 level. The total number of new TB cases reported annually is less than 2000, which represents an incidence of less than 20 cases per 100 000, the lowest rate among all CEE countries. Between 60% and 70% of the cases are

clinically proven. However, since 1995, micro-epidemics caused by multi-resistant strains of mycobacterium tuberculosis in some social groups of the population have been discovered in the Czech Republic. Figures for sexually transmitted diseases (STD) are relatively stable: 400 HIV positives were reported up until 1998 and only 8 cases of AIDS were diagnosed in 1998. Syphilis incidence has slightly increased in the 1990s, growing from 2 per 100 000 population in 1991 to 5.5 in 1998. The incidence of gonorrhoea has decreased almost sixfold since 1991, which probably indicates under-reporting rather than a real change.

Organizational structure and management

The three main features of the health care system in the Czech Republic are *compulsory health insurance*, funded through contributions by individuals, employers and the state; *diversity of provision*, with mainly private ambulatory care providers and public hospitals which have contractual arrangements with the insurance funds; and *joint negotiations* by key actors on coverage and reimbursement issues. The government supervises the negotiations and has to finally approve their result; it may act on its own if the parties fail to agree.

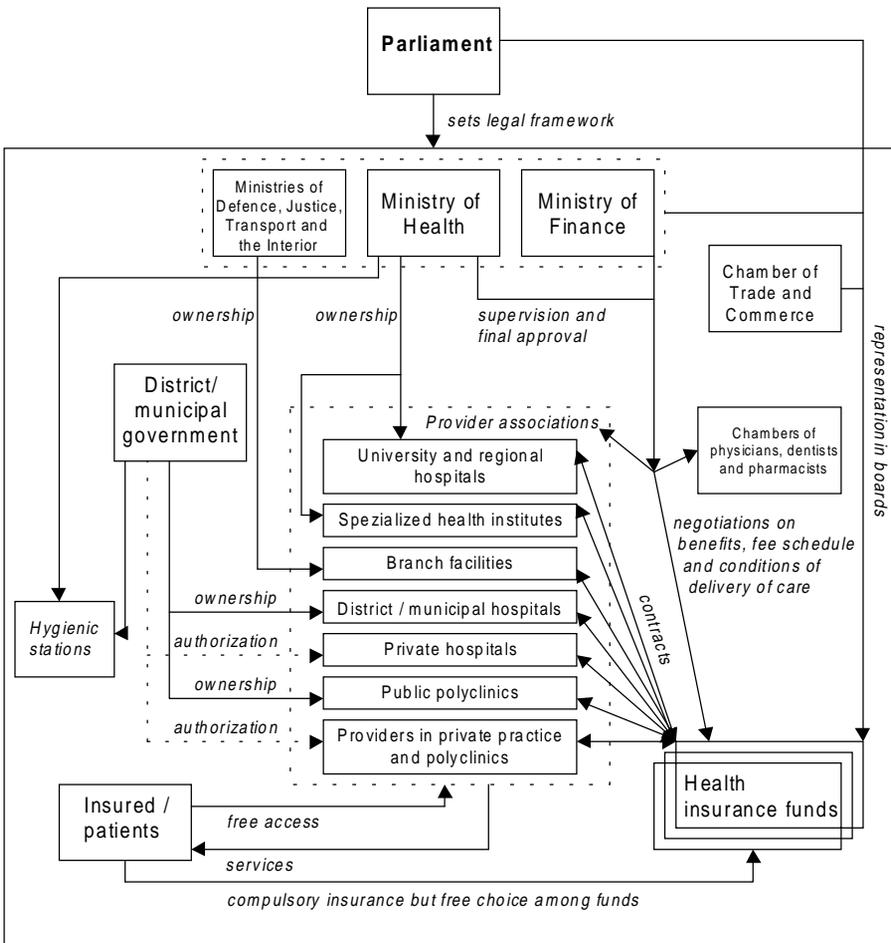
Fig. 3 depicts the major actors in the Czech health care system as well as their interrelationships.

Organizational structure of the health care system

In December 1990, the Czech Government approved the proposal of a new health care system, which was to be implemented by the Ministry of Health. The main principles are as follows:

- The new system of health care will form part of a global strategy for health regeneration and promotion;
- The state will guarantee appropriate health care to all citizens;
- Health services will be provided in a competitive environment;
- Every community shall implement the principles of the national health policy in its territory;
- Every citizen will have the right to choose his/her physician and health care provider;
- Health services will continue to be publicly-funded, but there will be a diversity of provision;

Fig. 3. Organizational chart of the health care system



- A basic element of public health care will be the provision of autonomous health care providers independent of the district institutes of national health;
- Curative care will be focused particularly on primary health care and also on ambulatory care in general;
- The health care system will derive its financial means from different sources (health insurance funds, state budget, local budgets, companies, citizens, etc.);
- A mandatory health insurance system will form an fundamental part of the health care system.

The parliament of the Czech Republic has to approve all legislation proposed by the Czech Government.

The basis for this new health care system emerged between 1991 and 1993. During this period, the Soviet-style health care system (the so-called Semashko model) was replaced with the European pluralistic model based on mandatory insurance and a public/private mix for the provision of health care. The health care system in the Czech Republic became a contractual system with a clear separation between financing and provision.

De-monopolization and decentralization was introduced, especially for ambulatory services. The state guarantees health services mainly through the health offices of the district authorities, called the district health offices and headed by district health officers.

Health insurance funds

Financial resources are mainly obtained through compulsory health insurance which is administered currently by nine health insurance funds. Their financing is determined by law and is based on contributions and on the redistribution of these contributions. Health insurance contributions are based on a certain percentage of income (13.5%), paid by employers and employees in a ratio of 2:1 for the employed, by self-employed persons directly and by the state (through the Ministry of Finance) on behalf of the large non-waged population (this includes pensioners, students, all children, etc.); see the section on *Health care finance and expenditure* for more detail.

The health insurance funds – which collect the contributions, contract providers and reimburse them for their services – are independent, legally constituted bodies (see the next section). At present, there are nine health insurance funds, although there were as many as 27 in the mid-1990s. The nine funds are included on the following page.

The national government

The state guarantees health care and the health insurance system and participates in the boards of directors and on the supervisory boards of the health insurance funds. The state guarantee is included in the Czech constitution, yet the state has only some of the tools required to enable the government to carry out this function. It has recently been proposed that a new body should be created for the administration of health insurance funds at the national level, which would fulfil this function. At the time of writing, this proposal is still under discussion.

1. "Všeobecná zdravotní pojišťovna" – General Health Insurance Fund (GHIF)
2. "Vojenská zdravotní pojišťovna" – Military Health Insurance Fund
3. "Hutnická zaměstnanecká pojišťovna" – Metallurgical Health Insurance Fund
4. "Oborová zdravotní pojišťovna bank a pojišťoven" – Branch Health Insurance Fund of Banks and Insurance Companies
5. "Zaměstnanecká pojišťovna Škoda" – Skoda Health Insurance Fund
6. "Zdravotní pojišťovna Ministerstva vnitra ČR" – Health Insurance Fund of the Ministry of Interior of the Czech Republic
7. "Revírní bratrská pokladna" – Miner Brothers' Fund
8. "Zdravotní pojišťovna METAL-ALIANCE" – METAL-ALIANCE Health Insurance Fund
9. "Česka národní zdravotní pojišťovna Česká národní zdravotní pojišťovna" – Czech National Health Insurance Fund (which merged with the former "Stavební zdravotní pojišťovna" – Construction Industry Health Insurance Fund on 1 January 2000).

The Ministry of Health is responsible for the preparation of health care legislation, health and medical research, for the licensing of pharmaceuticals and medical technology, and for the management of two institutes for postgraduate education and training of health professionals.

It also organizes the joint negotiations concerning the list of services covered by health insurance which serves as the fee schedule. In its supervisory role, the Ministry has to ensure that the results of these negotiations are meeting legal requirements and the public interest. It is entitled to act if no agreement can be reached during the negotiations.

The Ministry directly manages regional hospitals, university hospitals, specialized health care facilities and institutions for research and postgraduate education. It is also responsible for the supervision of natural spas, springs and sources of mineral water.

Districts and municipalities

Between 1990 and 1992, both the district institutes of national health and regional institutes of national health were dissolved and health care facilities obtained a high degree of legal and economic autonomy. The state health administration was incorporated into the district authorities in the form of health offices headed by district health officers. Unfortunately, neither the legislative nor the financial powers of these offices have been clearly defined. The district health officers are under the direct supervision not of the Ministry of Health, but of the Ministry of Interior Affairs, while the Ministry of Health provides

methodological guidance and supervision. Legally, however, the district health offices are responsible for ensuring that accessible health services are provided in their areas.

Health care facilities

There are currently more than 20 000 (mainly private) health care providers in the Czech Republic. The network of health care providers is comprised of:

- general practitioners for adults
- general practitioners for children and youth
- primary health care gynaecologists
- primary health care dentists/ stomatologists
- ambulatory specialists
- hospitals
- other bed-care facilities
- emergency and first-aid services
- home-care services
- pharmacies
- hygienic (public health) stations.

Between 1993 and 1996, decentralization was focused mainly on ambulatory services. Many physicians established their own private practices while continuing to work under contract by the health insurance funds. “Private” in this sense means private provision and public financing. Czech legislation and the Institute of Health Information and Statistics divide health care facilities into two categories: state-owned (run by the Ministry of Health and district authorities) and nongovernmental (belonging to private and church entities, communities, municipalities or nongovernmental organizations).

Primary health care is provided by a network of general practitioners for adults and children, general (field) gynaecologists and dentists/stomatologists. Most of these physicians work in private practice. Specialized ambulatory care is provided in and out of hospitals.

Hospitals are usually owned by the districts and municipalities or by the national government and are contracted with to provide services to the insured. Only 9% of beds are in private hospitals. Municipalities also own the health centres and polyclinic facilities where the majority of primary health care doctors and ambulatory specialists are based, although they are usually in private practice as they rent the facilities. Like the hospitals, these physicians are under contract with the health insurance funds.

The special health care facilities network consists of the following institutions: residential homes for children, day clinics, children's centres, nurseries (creches), health transportation services, and emergency services. Outside this network are the mostly privately owned pharmacies.

“Hygienic” services (public health services) continue to be separated into regional and district public health stations according to the current administrative structure of the country. A substantial reduction in the number of public health stations is proposed in a new Health Protection Act.

In addition to the main health care system, in the past, there were parallel systems of health care provision organized and financed by a number of other ministries, i.e. the Ministry of Defence (army), the Ministry of Interior Affairs (police), the Ministry of Justice (prisons) and the Ministry of Transport and Telecommunications (railroads). Two of these – the Ministry of Internal Affairs and the Ministry of Defence – continue to own separate health care facilities while their employees are insured through separate health insurance funds. Under the present system, some of these facilities have contracts with health insurance funds and are therefore available to the whole population, while access to others is still restricted to a particular group of employees.

Other actors

Professional chambers are responsible for the quality and ethics of health care and the licensing of health care professionals (physicians, dentists and pharmacists). Since 1997, associations of health care providers negotiate rates on behalf of their members with the health insurance funds.

Public participation in the health care system is through the management and supervisory boards of health insurance funds. It is intended that members of the public will be able to participate in similar boards of hospitals. It is important for the future that both the municipalities and the public are more active and take more responsibility in addressing health issues.

Planning, regulation and management

The National Planning Committee was abolished in 1990 and the planning process was streamlined and decentralized. The Czech Republic does not have a national planning agency at present. This function is carried out in the field of health and health care by the Ministry of Health.

In accordance with health insurance legislation, there are regular – usually every six months – negotiations among the health insurance funds, providers

(hospital associations, hospitals and private physicians) and professional chambers. These actors negotiate about different issues: 1) on the range of services to be covered under the compulsory health insurance system as well as on the number of reimbursement points per service in the fee schedule; 2) the monetary point value used to determine actual reimbursement; and 3) conditions for delivering care in the major sectors of health care. The government has to ensure that the result meets both legal requirements and the public interest before finally approving it. It is then issued as an order by the Ministry of Health or the Ministry of Finance (for issue number 2). The government is also entitled to make the necessary decisions if no agreement can be reached. This process of joint negotiations followed by governmental approval may be considered a backbone of the Czech health care system.

The health insurance funds are relatively independent bodies responsible for entering into contracts with health care providers. With the exception of some special cases, health care facilities are direct contractual partners of the General Health Insurance Fund (GHIF) and the other health insurance funds. Contracts are generally for a two-year period.

While the GHIF was established by law, additional health insurance funds may be instituted according to rules set out in another law. Citizens are free to choose any one of these funds annually; initially, it was possible to choose a health insurance fund every three months. All health insurance funds are required to provide the same coverage under the same conditions, as defined by law and guaranteed by the state. (Initially, until 1994 and on a more limited scale until 1997, the funds were allowed to compete with each other by including supplementary benefits.) Acceptance into any insurance fund is open to everybody and is not limited to any special group of people. The health insurance funds have the right (but not the duty) to contract health care providers.

The largest health insurance fund, the GHIF, has 77 district branches: one in each district of the Republic. Each is managed by a director, who is accountable to a supervisory board (consisting of three representatives of the insured and two of employers) and a board of directors (with five and four representatives from each of these groups, respectively). The representatives of the insured are elected by the respective district assembly, while the representatives of the employers are delegated by the District Chamber of Trade and Industry. At the national level, the supreme body is the Assembly of Representatives which authorizes the annual report, the annual accounts and the annual budget before they are finally approved by the parliament (which also elects the GHIF director general). Strategic plans and policy decisions are made by a board of directors which has 30 members: 10 each from the government (Ministries of Finance, Health and Social Affairs), the insured (elected by the parliament) and employers (delegated by the Chamber of Trade

and Industry). A supervisory board consists of nine members: three representatives from each of the previously mentioned groups.

For all other health insurance funds, the number of members of both the board of directors and the supervisory boards is not specified by law but membership must always be equally divided among the state (appointed by the Ministry of Health), the insured (elected by the parliament) and employers (delegated by the Chamber of Trade and Industry). Unlike the GHIF, in these cases, the board of directors has the power to appoint a director.

In order to start a new health insurance fund, an application for permission must be made to the Ministry of Health and to the Ministry of Finance. The fund must have a minimum of 50 000 people insured and a financial reserve as laid down by law.

A number of interministerial committees have met to discuss issues relevant to health services. These include: the National Board of Health, which is responsible for implementing the Czech National Health Programme; the National Board of Environment and Health, which is chaired by the Minister of Health and is responsible for implementing the National Environmental and Health Action Plan; the Governmental Anti-Drug Committee; the Committee on the Handicapped (both of which are headed by the Prime Minister); and committees on AIDS and on child abuse.

The Czech Medical Chamber (Czech Chamber of Physicians) is intended to be the guarantor of the quality of health care provided and also grants the licences needed for registration with the district office.

The Czech Medical Association, a voluntary organization open to physicians as well as non-physicians and a member of the World Medical Association, has begun to develop standards and guidelines for diagnostic and therapeutic procedures in partnership with the Ministry of Health and the Czech Medical Chamber.

Quality standards will be implemented, step-by-step, and an accreditation procedure is planned for all hospitals and health care facilities. This began in 1995 as a collaborative effort between the Ministry of Health, health insurance funds and the associations of hospitals and professional chambers.

Decentralization of the health care system

Decentralization has been a major feature of Czech health care reforms, but its implementation has not yet been completed. The task of financing health care

has been delegated to health insurance funds, which are under the supervision of the state.

Some regulatory functions have been devolved to the district health offices at district level. These include the issuing of authorisation permits to private physicians and health facilities. The professional chambers are responsible for the licensing of health care professionals.

The preferred method of decentralizing health care provision has been through privatization. This has been achieved within various parts of the health care system. The great majority of primary health care providers (including dentists/stomatologists) are now private, mainly renting community-owned buildings, offices and surgeries. The country's spas and pharmaceutical companies are private and the vast majority of pharmacies has also been privatized.

To date, a number of polyclinics but only small-sized hospitals have been privatized. Most hospitals are still owned by the state (regional and specialized hospitals) or by districts/municipalities (smaller hospitals). Following the break-up of the local, district and regional health institutes which previously owned the state hospitals, ownership of the smaller hospitals was transferred to districts and municipalities.

Privatization of hospitals has been delayed by a lack of political and professional consensus about the aims of the process. Moreover, there are no funds available for such changes and, as the revenues of health care facilities are not high, hospitals are not likely to be a promising field for investors. Thus, the process of privatizing hospitals recently came to a stop and is most likely not to be continued at the moment.

Health care finance and expenditure

Main system of finance and coverage

The process of transition from a tax-financed system to one financed through health insurance was accelerated by pressure from health professionals who expected increased levels of income with health insurance. A new health insurance system was introduced on 1 January 1993, financed through compulsory health insurance. Currently, nine health insurance funds administer the system.

The system is based on solidarity and equity. It is financed by contributions from individuals, employers and the state (on behalf of the unemployed, pensioners, children and dependants up to 26 years of age, students, women on maternity leave, men serving in the military, prisoners, and people receiving social welfare). Approximately 53% of population is insured by the state. The state also acts as guarantor of the system.

Population coverage is based on permanent residence and is broadly based. It includes foreign nationals if they are either employed by organizations based in the Czech Republic or are permanent residents. There are no excluded groups and no changes in population coverage have taken place in recent years; nor are any such changes expected in the near future. Opting out of the insurance system is not permitted in the Czech Republic.

Contributions are defined by law as a percentage of wages (before tax): employees pay 4.5% and employers 9% (13.5% altogether). There is a ceiling on contributions which is set at about six times the average salary in the Czech Republic. This makes the funding system mildly regressive. The self-employed pay the same total percentage (i.e. 13.5%) but only on 35% of their profits. There is also a legally defined minimum contribution for the self-employed which may be adjusted according to the inflation rate; this is currently, 468 Czech Koruna (ca. 13 Euro) per person per month. Since almost 80% of the self-employed are not making (or declaring) any annual profit, they only

have to pay this minimum contribution. As a result, possible changes to this part of the health insurance legislation are currently under discussion.

The Ministry of Finance contributes the same percentage (13.5%) of 80% of the minimum wage on behalf of the more than 50% of the country's "state insured". In 1998, the system was slightly modified and the monthly "wage" for the state insured was fixed at 2900 Czech Koruna (ca. 80 Euro), i.e. the state contributes 391.50 Czech Koruna (ca. 11 Euro) per person per month.

The choice of insurer is made by individuals (rather than by their employers) and the insured may change funds on an annual basis (initially, the insured could change funds every three months). The GHIF is legally obliged to insure everyone. If an insurance fund goes bankrupt, its clients usually pass to the GHIF. The other health insurance funds are also legally required to insure all applicants, but there are reports that, in practice, they are able to select their members.

The GHIF is by far the largest fund, covering approximately 75% of the population, including almost all non-wage earners. Its solvency is guaranteed by the state. Children and pensioners can register with any health insurance fund, but most are registered with the GHIF. Both the Ministry of Internal Affairs (police) and the Ministry of Defence (military) have their own insurance funds, which evolved from the parallel health care systems existing under the communist government. The remaining insurers are generally organized through large companies or around certain categories of employees (miners, bank employees, etc.).

In recent years, 18 health insurance funds have disappeared from the market. Some of them went bankrupt, while others were abolished by the government for not meeting legal requirements. The causes for these problems were diverse: for example, inadequate underwriting for small funds, high overhead costs for small funds, and too many special programmes (e.g., for the chronically ill, such as asthmatics). Some of the funds merged and others closed down. Many of the insured re-insured themselves with the GHIF, which has therefore remained the main insurer despite a temporary decline in membership between 1993 and 1995.

The bankrupt funds are also part of the cause for the debts in the system – debts which accumulate as unpaid providers cannot pay their staff or their suppliers. Financial difficulties were concentrated mainly in the hospital sector, where the majority of hospitals were operating at some degree of deficit. The cumulative deficit at the end of 1999 is estimated at 4.2 billion CZK (about 120 million Euro) or approximately 4% of annual health expenditure.

The initial idea that the health insurance funds would compete by offering different services proved to be a mistake. At first, various services were offered

in addition to a basic package in the competition for members. However, it became evident that many health insurance funds did not have sufficient funds to cover even basic health care services. Reimbursement of services in addition to the basic package was restricted by law in 1994 and the scope for competition among funds based on supplementary benefits was completely abolished by legislation in 1997.

Health insurance funds are not permitted to make a profit. Any surplus goes to a special account called the reserve fund. The health insurance funds are no longer allowed to offer additional services to their clients as this has contributed to the bankruptcies. In the case of financial difficulty, only limited assistance is available from the state, but the insured are protected from loss of coverage by the existence of the GHIF safety net. The Ministry of Labour and Social Affairs, the Ministry of Finance and the Ministry of Health all participate in the boards of the funds, while the Ministry of Health is responsible for the supervision which in practice, at least initially, has been fairly weak.

Health insurance contributions have been redistributed in order to lower the potential for risk selection and to ease the financial difficulties of health insurance funds with adverse risk structures. Thus, 60% of all contributions are liable to redistribution, which is administered by the GHIF according to a capitation formula. Members over the age of 60 are allocated three times the standard capitation rate than those under the age of 60. No other adjustments are made. Despite reallocation, the smaller insurers receive disproportionately larger revenues per capita since, on average, they have better earning members and may keep 40% of contributions outside the redistribution mechanism.

A new redistribution scheme including 100% of health insurance contributions using an indexed system by age and sex in about 16 groups has been developed, but has not yet been approved by the government and parliament. There is also a proposal to subsidize a joint (security) fund of health insurance funds from the state budget to cover extremely costly cases and services.

In recent years, health insurance funds have been experiencing increased financial difficulties. Problems have been caused by factors such as inadequate inspection and control of staff workloads, insufficient contribution levels and inadequate cost containment under the initial fee-for-service system (see the section on *Financial resource allocation*).

Changes to legislation may be required to address problems brought about through weak administrative control mechanisms. For example, the system ensures that the vast majority of salaried employees and their employers pay contributions, but enables some of the self-employed who should pay contributions to avoid doing so or to pay very little.

Health care benefits and rationing

Health care services are covered by the health insurance funds, while sickness benefits (i.e. sick pay) are paid from the state-run social security fund, which is not part of the national budget. Some proposals exist for the unification of both systems, but these will probably not be implemented in the short term.

The following services are fully or partially covered by health insurance:

- preventive services (preventive examinations, screening, vaccinations following the recommended immunization calendar, etc.)
- diagnostic procedures
- ambulatory and hospital curative care, including rehabilitation and care of the chronically ill
- drugs and medical devices
- medical transportation services
- balneological (spa) therapy (if indicated and prescribed by a physician).

In principle, any treatment required for the cure of illness or to improve health status is approved for reimbursement. In addition, insurance legally covers regular preventive examinations of infants and children (nine during the first year of life, at eighteen months of age, at three years of age and afterwards every two years) as well as those for adults (every two years). Prophylactic dental treatment once a year (twice a year for children) and some standard dental treatments are free. Rehabilitation, fertility treatments and psychotherapy (with some restrictions) can still be obtained under the state system. Under certain circumstances, spa treatments (balneological therapy) may be reimbursed either partially or fully. If medically indicated, abortions are also covered (while others have to be paid for privately).

In every case, the cheapest available treatment is fully covered. The respective health insurance fund, represented by a review doctor, may examine the circumstances and agree to the full reimbursement of a more expensive treatment.

Pharmaceuticals are classified into three lists. Those on the generic list are covered, but any others generally require out-of-pocket payments. Non-generic drugs may be approved for reimbursement if the doctor from the health insurance fund claims that there are no alternatives.

The health care benefits package is very broad in the Czech Republic and includes almost all health care needs. As mentioned, there are regular negotiations among the health insurance funds, providers (hospital associations,

hospitals and private physicians), professional chambers, scientific organizations and patients' associations to negotiate upon the covered services in detail which are then listed in the fee schedule with the number of points for reimbursement. In its supervisory role, the Ministry of Health has to ensure that the result meets legal requirements as well as the public interest before it issues it as an order.

Initially (i.e. until 1997), insurers were allowed to offer additional services, but not to offer less than the basic package. Utilization rates of health care have risen markedly since the socialist period. As a result, the benefits package is unlikely to be broadened in the future and some consideration is being given to having a more prudent and restricted set of services.

Only a limited number of services are excluded from the statutory health care system. Cosmetic surgery for non-medical reasons and selected services made on patient request (primarily various medical certificates) are not covered. A number of services require co-payment, including certain kinds of dental care (particularly dentures). Prostheses, eye glasses and hearing aids may be either partially or fully reimbursed.

Social care is not included in the statutory health insurance system and is paid for partly paid by patients and partly by the Ministry of Social Affairs.

Complementary sources of finance

At the beginning of the reform process, a multi-source system of financing was proposed. Five financial sources were expected for health care financing at the beginning of the 1990s:

1. health insurance
2. state budget
3. municipal budgets
4. out-of-pocket payments
5. donations.

Voluntary supplementary insurance is still under consideration. At present, health insurance is clearly the main source of financing with slightly more than 80%. Taxes, the second most important source with currently a little bit over 10%, cover both non-investment and investment expenditure in both state and local government budgets (Table 1).

Table 1. Percentages of main sources of financing, 1990–1998

Source of finance	1990–1992	1993	1994	1995	1996	1997	1998
Public	100	94.8	94.0	92.8	92.6	91.9	92.2
Taxes (direct expenditure)	100	18.9	16.5	16.5	12.2	12.0	11.4
Statutory Insurance (total)	–	75.9	77.5	76.3	80.2	79.2	80.5
Private	–	5.2	6.0	7.2	7.4	8.1	7.8
Out of pocket	–	5.2	6.0	7.2	7.4	8.1	7.8
Private insurance	–	–	–	–	–	–	–
Other	–	–	–	–	–	–	–

Source: Ministry of Finance, Czech Republic (NB: According to Ministry of Health figures, the percentage of taxes is slightly lower while the percentage of statutory insurance is slightly higher).

Taxes

Taxes are used both to cover expenditures on the national as well as on the district and municipal levels. At the national level, the Ministry of Health finances the capital investments of facilities it directly manages, such as regional hospitals, university hospitals and specialized institutions for research and postgraduate education. Public health services are also financed directly by the Ministry of Health and the district hygienic stations (DHS) from local budgets. Direct funding from the Ministry of Health covers part of the cost of training medical personnel and of running specific specialized health programmes. These programmes include AIDS prevention, drug control, the operating costs of long-term care institutes, and research and postgraduate education. Social care is paid for partly by the Ministry of Social Affairs and partly by users of the services.

Smaller hospitals are owned by the municipalities, which must provide financial assistance to those hospitals whose revenues have not been sufficient to cover their costs.

Out-of-pocket payments

Cost-sharing is required mainly for selected drugs, dental services and some medical aids. Out-of-pocket payments represented some 5% of total health care expenditure in 1993 and increased to around 8% by 1998. The 1994 regulation to pay a bypass fee for visiting ambulatory specialists without previously contacting a general practitioner was not fully implemented and was abolished in 1997.

Voluntary health insurance

At present, there is only a very small market for additional insurance. This includes coverage for health care when travelling abroad, for foreign nationals who are not eligible for the compulsory health insurance system and for certain services not provided under the state system (e.g. cosmetic surgery or some kinds of dental care).

External sources of funding

There are no important external sources of funding in the Czech health care system.

Health care expenditure

In all countries, the percentage share of GDP spent on health expenditures is considered to be an important economic indicator. In the Czech Republic, health expenditure grew from 5.2% in 1990 up to a peak of 7.8% in 1994 and then started to decrease again, to 7.4% in 1997 and 7.2% in 1998 (Table 2). The significant increase in expenditure was directly related to the introduction of the health insurance system. (NB: Other sources which set the percentage around 0.7% lower do not include private health expenditure.)

Table 2. Trends in health care expenditure, 1980–1998

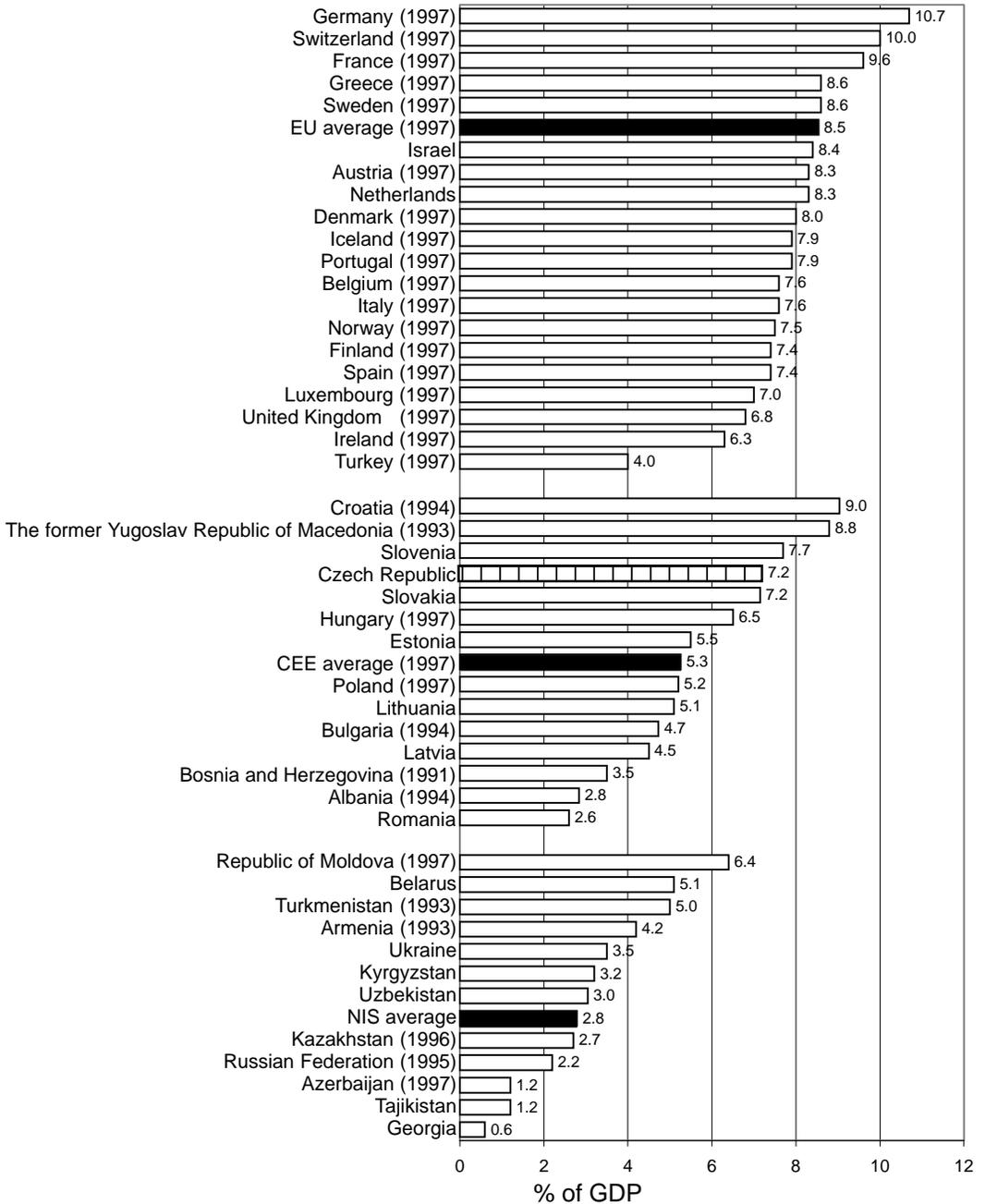
Total expenditure	1980	1985	1990	1995	1996	1997	1998
Value in current prices, CZK (x 1000 millions) ^a	15.2	20.0	30.1	102.4	112.4	122.8	131.1
Share of GDP (%)	–	–	5.2	7.6	7.3	7.4	7.2
Public share of total expenditure on health care (%)	100.0	100.0	100.0	92.7	92.5	91.7	91.9

Source: Ministry of Health/ Ministry of Finance, Czech Republic.

Note: ^a until 1992 in CSK.

Czech expenditure as a percentage of GDP is higher than the 5.3% average for central and eastern European countries but equally less than the 8.5% average for western European Union countries (Fig. 4). If compared to neighbouring countries, the trend is similar to that found in Slovakia and Hungary, while the rate in Poland is lower, in Austria slightly higher and in Germany much higher (Fig. 5).

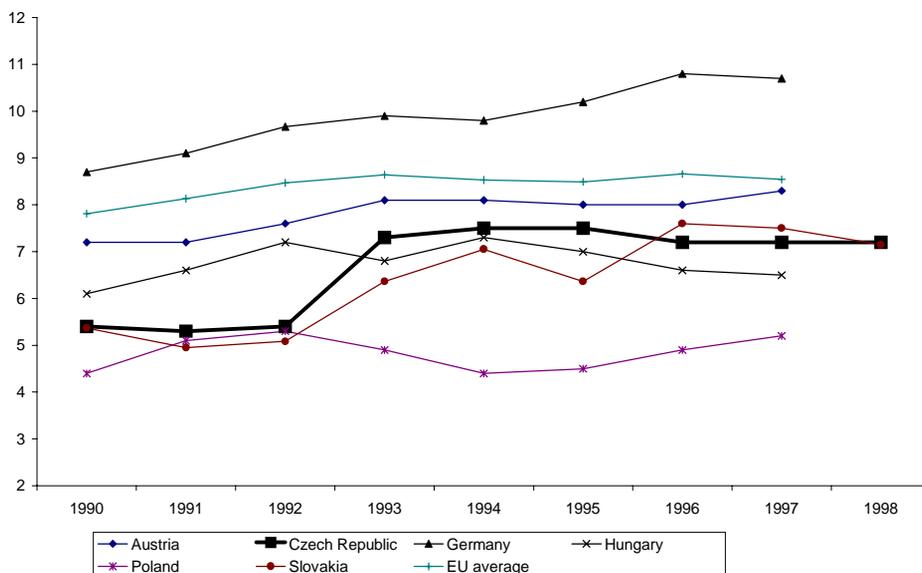
Fig. 4. Total expenditure on health as a % of GDP in the WHO European Region, 1997 (or latest year)



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

Czech Republic

Fig. 5. Trends in health care expenditure as a share of GDP (%) in the Czech Republic and selected countries, 1990–1998



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

Of course the differences are much more pronounced if per capita expenditure is used as a basis (Fig. 6). The Czech Republic’s public expenditure as a percentage of total health expenditure is lower than in most other central and eastern European countries, but is higher than in western social insurance countries (Fig. 7).

Inpatient care and pharmaceuticals constitute the categories which consume the largest share of health care expenditure – with the latter well above the average for OECD countries. Direct public investment expenditure has fallen below 5% (Table 3).

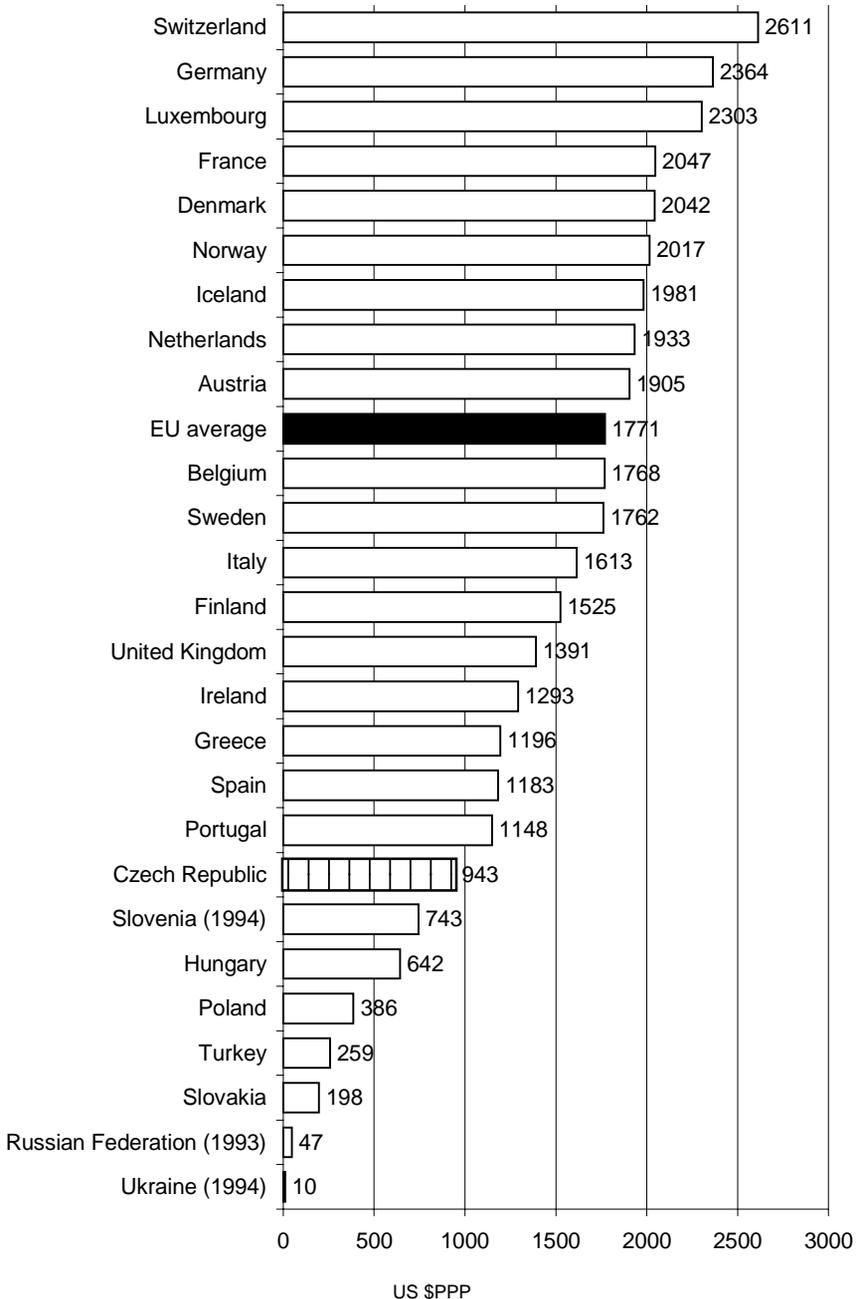
Table 3. Health care expenditure by categories (as % of total expenditure on health care), 1980–1998

Health care expenditure	1980	1985	1990	1995	1996	1997	1998
Public (%)	100.0	100.0	100.0	92.7	92.5	91.7	91.9
Inpatient care (%)	–	–	–	29.4	33.8	35.6	–
Pharmaceuticals (%)	17.8	18.4	17.8	25.5	25.3	25.3	–
Investment (%)	8.0	8.9	13.6	7.9 ^a	5.3 ^a	4.1 ^a	4.5 ^a

Source: Institute of Health Information and Statistics (UZIS), Czech Republic.

Note: ^a investment from state budget only.

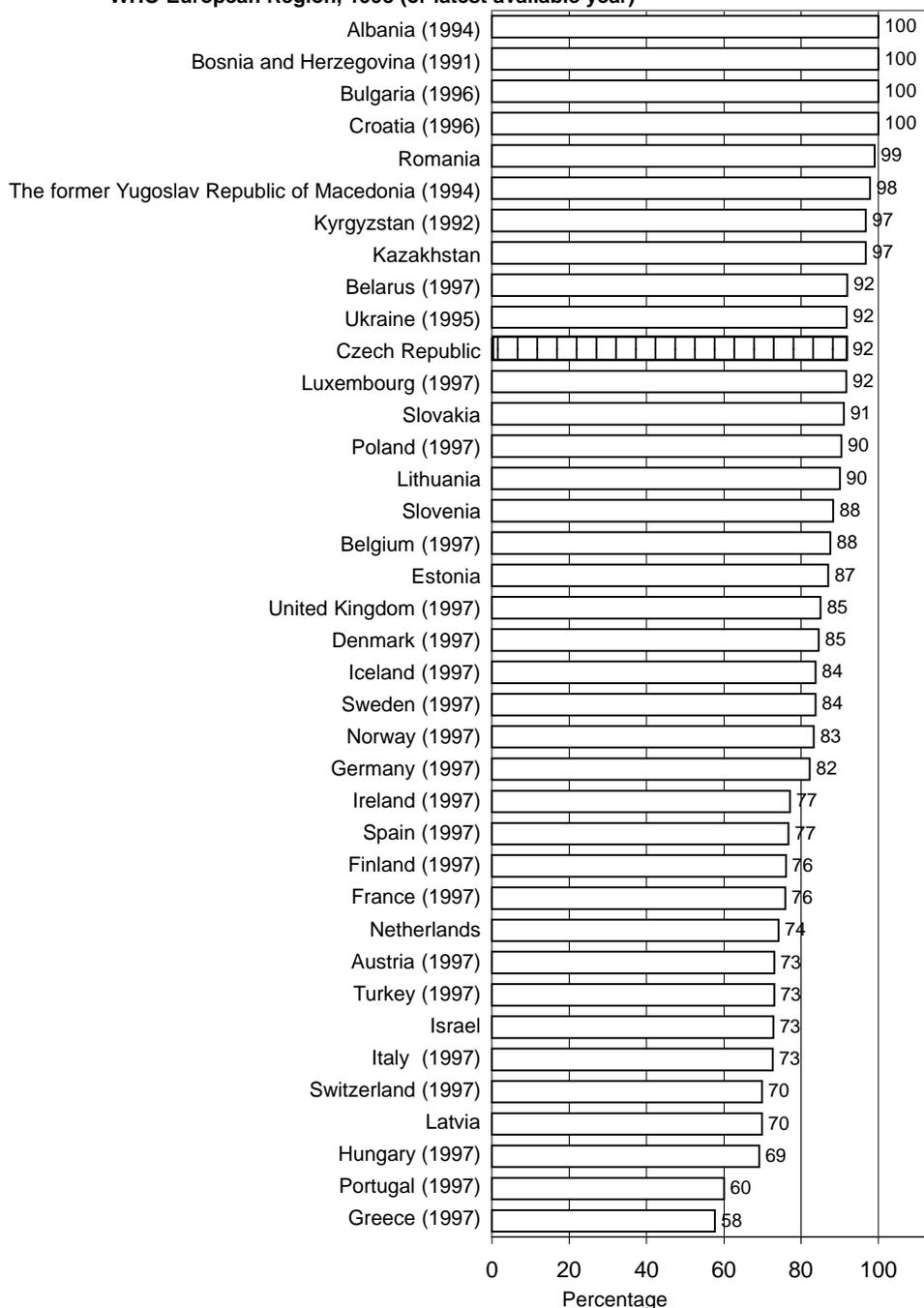
Fig. 6. Health care expenditure in US \$PPP per capita in the WHO European Region, 1997 (or latest available year)



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

Czech Republic

Fig. 7. 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.

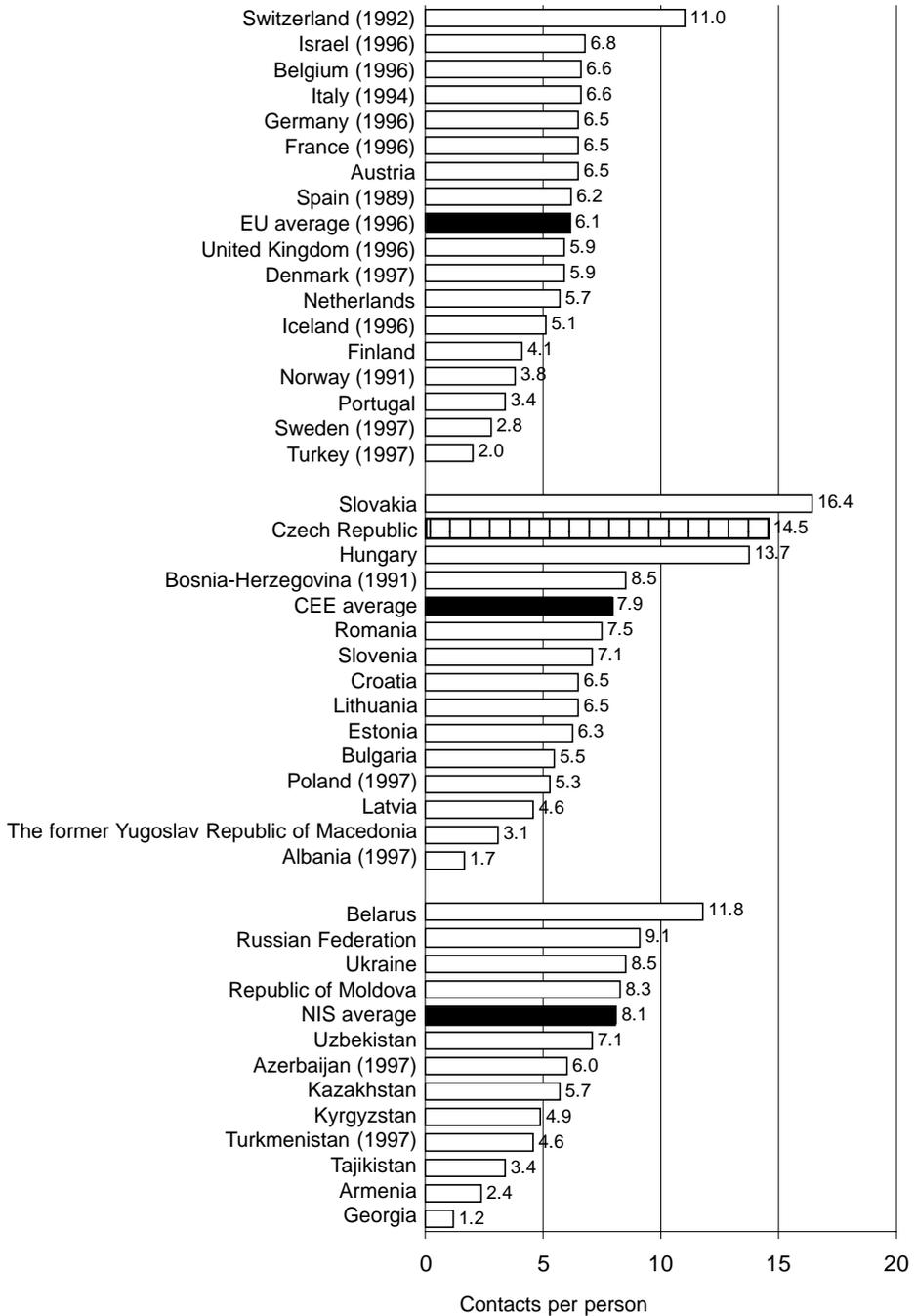
Health care delivery system

Primary health care

Primary health care is organized at the district level. The district health office is responsible for ensuring that accessible primary health care services are available in the district. Citizens register with a primary health care physician of their choice and can re-register with a new physician every six months. There are no restrictions on patients' choice of primary health care physicians and on access to them. There are four groups of doctors in the Czech health care system with whom patients have the first point of contact: general practitioners for adults; general practitioners for children and youth (paediatricians); ambulatory gynaecologists; and dentist/stomatologists. In 1994, there was one general practitioner for approximately 1670 inhabitants over the age of 15 and one ambulatory paediatrician for approximately 1150 children and adolescents. On average, there were 4840 women per gynaecologist and 1760 persons per dentist/stomatologist. In 1998, the numbers were as follows: 1780, 1170, 4890 and 1770 respectively, i.e. the number of adults cared for by one general practitioner increased, while the other ratios remained more or less constant. The number of patient-physician contacts is among the highest in Europe (Fig. 8).

About 80% of primary health care physicians and 90% of dentists/stomatologists were in private practice already by 1994, and more than 95% in 1999. The entry of doctors into primary health care practice is controlled through licensing by the Czech Medical Chamber and the issuing of authorization permits by the district health office. Doctors then contract with health insurance funds. The private practices are managed differently depending on the local situation. Most primary health care physicians work alone. A group of primary health care physicians may work together in health centres, or they may decide to work in one of the few polyclinics that provides primary health care besides

Fig. 8. Outpatient contacts per person in the WHO European Region, 1998 (or latest available year)



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

Czech Republic

specialist care. The centres are owned by the local community (municipality) and are run by a director. Primary health care physicians who are in private practice pay rent for using the facilities of the centres; in general, these rents are quite high.

The full range of primary health care services includes general medical care, maternal and child health, gynaecology, dentistry/stomatology, home care by nurses, 24-hour emergency coverage and a number of preventive services (immunization, screenings, etc.). Health centres tend to be well-equipped; most have electrocardiograms, ultrasound and often X-ray equipment. They also have some diagnostic laboratory facilities and employ nurses and physiotherapists. Primary health care doctors who work alone have direct access to fewer facilities.

Working conditions for primary health care physicians depend on the population, local conditions and whether the location is largely urban or rural. A large part of the work of these physicians involves certifying absences from work. In addition, referral rates to specialists are high. There were plans to strengthen the role by of primary care physicians by introducing self-certification for short periods of illness. Since there are now financial incentives for primary health care physicians to take on more tasks, some are providing more specialized services to their patients. To deter wasteful services, it was decided that the main kind of reimbursement would be through capitation, but that extra desirable services would be reimbursed through fee-for-service. In addition, both pre- and postgraduate training of primary health care providers are to be implemented following European Union recommendations.

Public health services

In the early 1950s, a network of district and regional hygienic institutes was established, with each district institute serving approximately 100 000 inhabitants in the provision of public health services.

These institutions, now called hygienic stations, are responsible for epidemiological surveillance (including infectious diseases), immunization logistics (such as the supply of vaccines) and safety measures concerning environmental hazards, food and other areas. As they share public health duties with other parts of the former state health care system, the hygienic services are not directly equivalent to a public health network. Primary health care facilities, for example, are responsible for preventive services, immunization and antenatal services (these activities are financed by the health insurance funds).

Health promotion and education programmes are usually organized and funded directly by the Ministry of Health. A set of national priorities was identified in the National Programme of Health Restoration and Health Promotion in 1992, a medium-term programme to improve national health status. These priorities emphasized smoking cessation and diet as activity areas, as well as programmes for healthy schools, homes, workplaces and cities. A long-term strategy, the National Health Programme, was submitted for government approval in 1995. Its implementation is the responsibility of the National Health Board, led by the Minister of Health. Any organization (public or private) can submit a health promotion project for funding under the National Health Programme. Legislation prohibiting smoking in public places was enacted in 1989 and legislation restricting advertising of tobacco is being considered. At the same time, a new law on tobacco and tobacco products control is under preparation.

The National Environmental and Health Action Plan was approved by the Czech Government in December 1998. The National Environment and Health Board, chaired by the Minister of Health, started working in 1999 on the implementation of the plan at national and local levels.

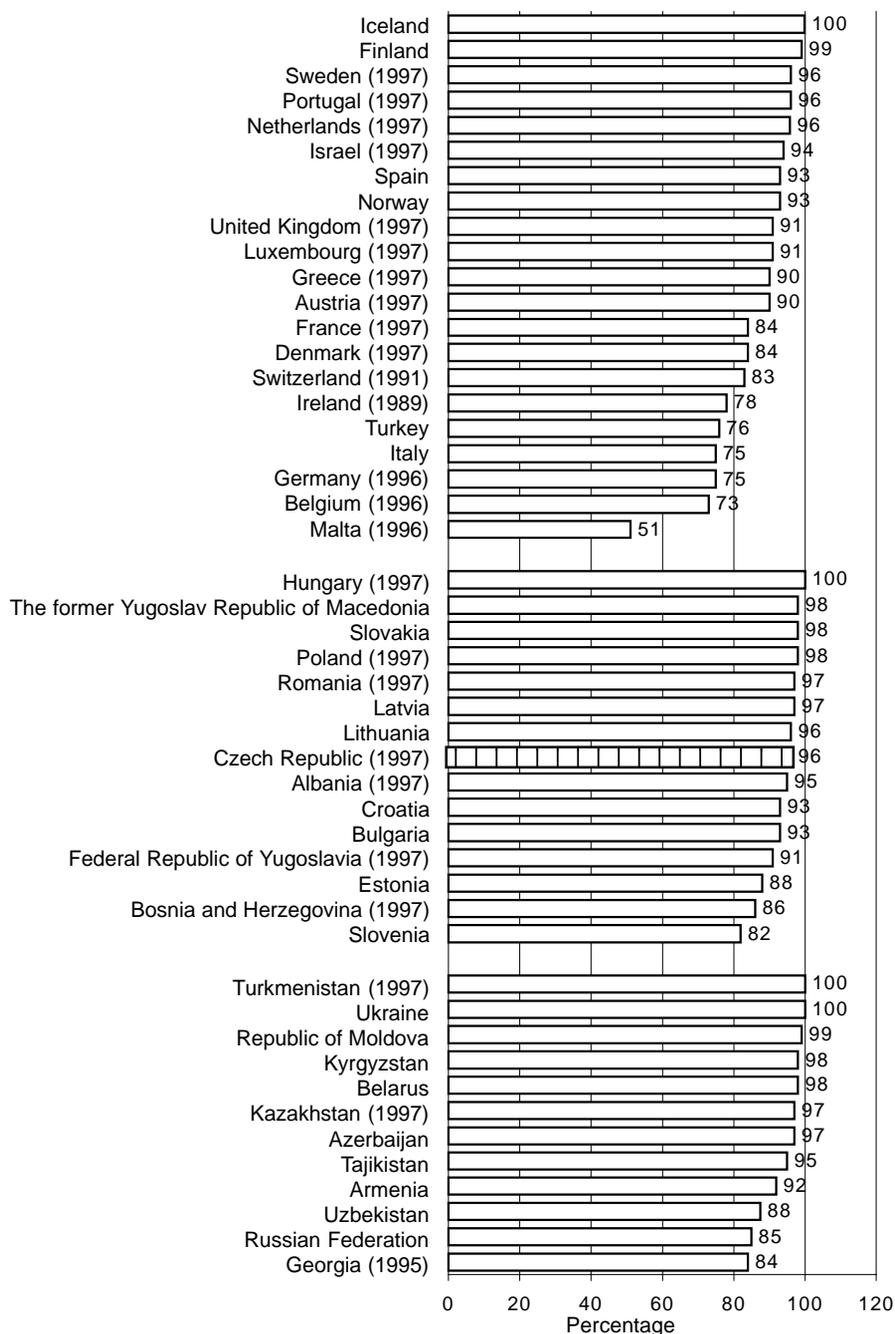
Screening programmes for adult diseases (for example, cervical cancer or breast cancer) have not yet been organized at national level.

Regarding health indicators, rates for the major immunizable diseases vary between 99% and 95%, which are high if compared to most western European countries (Fig. 9). The global children immunization programme covers tuberculosis, diphtheria, tetanus, pertussis, poliomyelitis, measles, mumps and rubella. Immunization against hepatitis A and B, tick-borne encephalitis, haemophilus influenzae B, and meningococcal disease is available upon request and requires full payment. A mass immunization strategy against hepatitis B is under consideration for adolescents from the age of 12 and against haemophilus influenzae B for young children.

Since 1990, efforts to change the existing system have emerged both from within and from outside the hygienic service. Plans to reform state and locally-financed public health services are primarily oriented towards increasing their efficiency. Excess capacity is being reduced step-by-step in a controlled manner. Some parts of public health facilities, especially various auxiliary laboratories, are being privatized.

A new Health Protection Act focusing on public health has been under the preparation since the beginning of the 1990s but consensus has not yet been reached.

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.

Secondary and tertiary care

The Czech Republic inherited a wide network of hospitals and polyclinics covering the entire country. These were formerly managed directly by the Ministry of Health under a three-tiered system of regional, district and municipal health institutes. The situation has changed significantly, however.

Today, specialized ambulatory medical services are provided in various forms: in solo practices, in polyclinics with several specialists and in hospital outpatient departments. The work in all of these settings is based upon contracts with the health insurance funds which, until 1997, freely reimbursed services on a fee-for-service basis (see the section on *Financial resource allocation*). Patient access is not restricted by a gatekeeping system.

Hospitals are owned by a public-private mix which includes the national government, districts and municipalities, as well as private not-for-profit and for-profit organizations. Independent of ownership, the hospitals contract with the health insurance funds to provide services to the insured.

The national government owns regional and university hospitals, which have over 1000 beds and also function as teaching hospitals. These hospitals provide the full range of specialized care and tend also to be tertiary referral centres. District and local hospitals comprise almost 60% of all hospitals, with around 60% of beds. The district hospitals have all the main specialties, their own transfusion units and a mobile emergency service; these institutions usually have just under 700 beds. Finally, the local hospitals usually have less than 200 beds and only four departments (internal medicine, surgery, paediatrics and gynaecology-obstetrics). While the national government owns only 27 (13%) of facilities, these are larger hospitals, and include 21 234 beds (31%). Of a total of 216 hospitals with 69 450 beds in 1998, 64 (30%) were in private hands; however, these only had 6469 beds (9%) of beds. Thus, for the most part, privately-owned hospitals are small.

Hospitals are managed by directors, who until recently have mostly been physicians; increasingly, however, they are managers or economists. Previously, the director was directly accountable to the municipality or Ministry of Health, but it has been proposed that there should now be a board or committee to supervise the hospital director. This would comprise representatives from the municipality, the Ministry of Health, local enterprises and employees of the hospital. The director is supported by three deputy directors, the clinical chief, the head of nursing and the head of finance. In practice, the director is very powerful within the hospital.

The physical quality of hospital services is generally good. Almost all local and district hospitals have either been newly built or reconstructed during the last 20 years. The situation with a number of central hospitals is somewhat more complicated. Some are located in very old buildings and reconstruction would be extremely expensive; others are new but burdened with debts related to their construction. The latter are restricted in their capacity to fund further development and, as a result, have a strong incentive to increase activity in order to repay their debts and invest further.

The Czech Republic has a cautious programme for a long-term decrease in the number of hospital beds, whereby beds used for acute care are being restructured into beds for long-term care. In 1990, there were still 10.9 beds per 1000 population, but in 1998, this number had been reduced by approximately 20%, to 8.6 (Table 4). At the same time, the average length of stay (inpatient beds) decreased even more sharply during these years, from 16 to 11.7 days. The number of acute care beds decreased between 1990 and 1998 from 8.1 to 6.7 per 1000 population with a decrease in average length of stay (acute care beds) from 12.5 to 8.8 days (Table 4). Occupancy rates have remained relatively low, which suggests that bed numbers in acute care are still excessive.

Table 4. Inpatient facilities utilization and performance, 1980–1998

Inpatient	1980	1985	1990	1995	1996	1997	1998
Inpatient beds	112 080	113 678	113 204	95 217	92 570	90 400	88 739
Inpatient beds per 1000 population	10.9	11.0	10.9	9.2	9.0	8.8	8.6
Admissions (x 1000)	1 957	1 983	1 871	2 076	2 108	2 082	2 021
Admissions per 100 population	19.0	19.2	18.1	20.1	20.5	20.2	19.6
Average length of stay in days	17.2	17.2	16.0	13.1	12.5	12.0	11.7
Occupancy rate (%)	81.7	82.3	72.7	78.3	77.2	75.3	72.4
Acute care	1980	1985	1990	1995	1996	1997	1998
Acute care beds	84 063	84 827	84 054	71 499	68 984	67 878	69 450
Acute care beds per 1000 population	8.2	8.2	8.1	6.9	6.7	6.6	6.7
Admissions (x 1000)	1 794	1 853	1 733	1 931	1 958	1 962	1 991
Admissions per 100 population	17.4	17.9	16.7	18.7	19.0	19.1	19.3
Average length of stay in days	14.2	13.6	12.5	10.3	9.7	9.2	8.8
Occupancy rate (%)	82.5	82.1	70.5	73.4	74.7	72.2	70.8

Source: Institute of Health Information and Statistics (UZIS), Czech Republic.

Starting from a level well above the CEE average in 1990, the Czech Republic has decreased its bed numbers more rapidly than other CEE countries but still has one of the highest densities of acute hospital beds (Fig. 10). The decline has been steeper than that of its direct neighbours, but bed density is now average for this group (Fig. 11). The Czech average length of stay is still rather high compared to most western European countries, while the occupancy rate has remained comparatively low (Table 5).

It was decided that a new regional health care facilities network should be set up to ensure better availability of health services. In 1997, it was determined that the main principle for reorganizing the health care system would be using public competition tender (organized in accordance with Act No. 48/97 Coll.). In May 1997, the Ministry of Health launched a programme for the re-structuring of hospitals. The target is to reduce acute beds to 5 per 1000 inhabitants and to increase long-term beds to 2 per 1000 inhabitants.

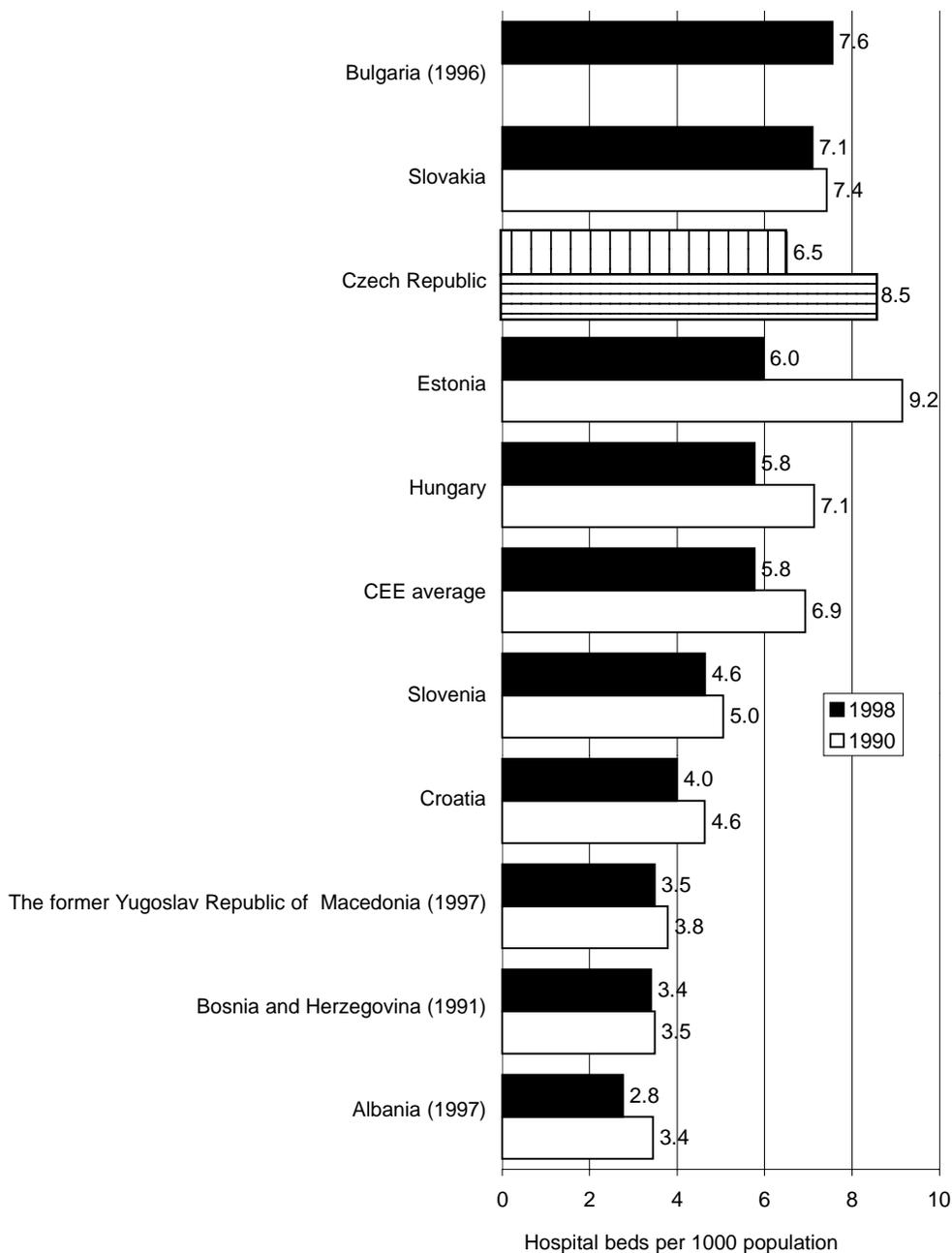
The restructuring was part of a policy to limit the number of health care providers. Accordingly, in 1997, the GHIF refused to enter into contracts with 176 new health care providers and terminated contracts with 130 others. The fund has also developed a model network of ambulatory services which limits numbers of physicians per 100 000 population according to specialty. For inpatient hospital care, the GHIF accepted the recommendation of the Ministry of Health to limit the capacity to 5 per 1000 population, broken down as follows: 4.45 acute beds in the four basic specialties (internal medicine, paediatrics, gynaecology, and surgery) as well as in nine other main specialties (anaesthesiology, ENT, infectious diseases, neurology, ophthalmology, orthopaedic surgery, tuberculosis and respiratory diseases, and urology) while 0.55 beds are reserved for all other specialties.

In addition to its 216 hospitals, the Czech Republic has 218 specialized health institutes (for the treatment of psychiatric patients, tuberculosis, rehabilitation and long-term care), including 56 spas with around 20 000 beds. Most of the spas have been privatized. Spa treatments are divided into three categories for the purposes of insurance reimbursement. This means that, depending on the category, treatments may be free to the patient, may require a co-payment, or may be fully paid by the patient.

There is a move towards substituting hospital care with less expensive alternatives. Home care and day case surgery are both increasing. The effect of this is to shift demand for care towards primary health care settings.

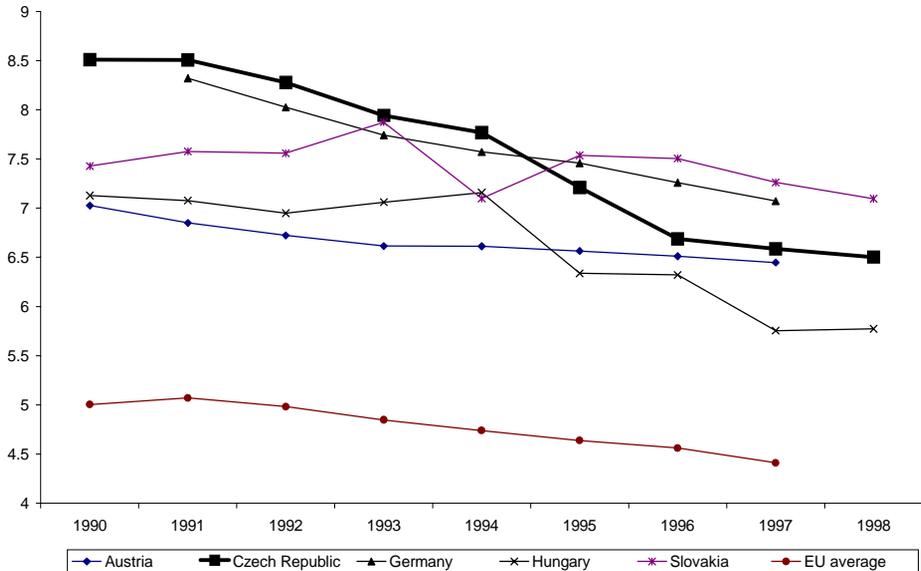
Accident and emergency care is a special type of care delivered at the location of injury or sudden sickness, and/or during transportation to the hospital. First aid medical care ensures the treatment of acute conditions.

Fig. 10. Hospital beds in acute hospitals per 1000 population in central and eastern Europe, 1990 and 1998 (or latest available year)



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

Fig. 11. Hospital beds in acute hospitals per 1000 population in Czech Republic and selected European countries, 1990–1998



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

Social care

Social services were poorly developed under socialism and non-medical care of patients often used to be given in hospital beds. Provision is still not sufficient to meet demand and there are gaps in services. Social care is provided as part of social services. It is financed by the state budget and administered from the social budget of districts or municipalities. Only strictly medical services are paid for by health insurance funds (e.g. care in psychiatric hospitals). The situation has improved in the last few years, with a trend in communities towards establishing numerous smaller social or community care facilities on a non-governmental and non-profit basis.

Long-term care of the mentally ill takes place in psychiatric hospitals (which are financed like all other hospitals). A move to community-based care is taking place slowly, along with education of the public about mental illness.

The present system offers satisfactory services to many patients; nevertheless, insufficient care is provided to patients with chronic mental illness. Mental health care is fragmented and is more episodic than continuous. Many types of services and working methods common in developed countries are not

Table 5. Inpatient utilization and performance in acute hospitals in the WHO European Region, 1998 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	24.7 ^a	7.1 ^a	74.0 ^a
Belgium	5.2 ^b	18.0 ^b	7.5 ^b	80.6 ^c
Denmark	3.6 ^b	18.8 ^b	5.6 ^b	81.0 ^b
Finland	2.4	20.5	4.7	74.0 ^c
France	4.3 ^a	20.3 ^c	6.0 ^b	75.7 ^a
Germany	7.1 ^a	19.6 ^a	11.0 ^a	76.6 ^a
Greece	3.9 ^f	—	—	—
Iceland	3.8 ^c	18.1 ^c	6.8 ^c	—
Ireland	3.4 ^a	14.9 ^b	6.7 ^b	82.3 ^b
Israel	2.3	18.4	4.2	94.0
Italy	4.6 ^a	16.5 ^a	7.0 ^a	76.0 ^a
Luxembourg	5.6 ^a	18.4 ^d	9.8 ^b	74.3 ^d
Malta	3.9 ^a	—	4.5	72.2 ^a
Netherlands	3.4	9.2	8.3	61.3
Norway	3.3	14.7 ^b	6.5 ^b	81.1 ^b
Portugal	3.1	11.9	7.3	75.5
Spain	3.1 ^c	10.7 ^c	8.5 ^b	76.4 ^c
Sweden	2.7 ^a	16.0 ^b	5.1 ^b	77.5 ^b
Switzerland	5.2 ^b	14.2 ^e	11.0 ^a	84.0 ^a
Turkey	1.8	7.1	5.5	57.3
United Kingdom	2.0 ^b	21.4 ^b	4.8 ^b	—
CCEE				
Albania	2.8 ^a	—	—	—
Bosnia and Herzegovina	3.4 ^g	7.4 ^g	9.7 ^g	70.9 ^g
Bulgaria	7.6 ^b	14.8 ^b	10.7 ^b	64.1 ^b
Croatia	4.0	13.4	9.6	88.2
Czech Republic	6.5	18.4	8.8	70.8
Estonia	6.0	17.9	8.8	74.6
Hungary	5.8	21.7	8.5	75.8
Latvia	—	—	—	—
Lithuania	—	—	—	—
Poland	—	—	—	—
Romania	—	—	—	—
Slovakia	7.1	19.3	10.3	77.9
Slovenia	4.6	15.9	7.9	75.4
The former Yugoslav Republic of Macedonia	3.5 ^a	8.1	8.9	66.5
NIS				
Armenia	6.0	6.0	10.7	30.2
Azerbaijan	8.0	5.6	—	—
Belarus	—	—	—	88.7 ^d
Georgia	4.6 ^b	4.8 ^b	8.3 ^b	26.8 ^d
Kazakhstan	6.6	14.9	13.0	91.2
Kyrgyzstan	6.7	15.8	12.9	81.7
Republic of Moldova	9.1	16.9	15.4	77.6
Russian Federation	9.0	19.9	14.0	82.5
Tajikistan	6.2	9.7	13.0	59.9 ^b
Turkmenistan	6.0 ^a	12.4 ^a	11.1 ^a	72.1 ^a
Ukraine	7.4	17.9	13.4	88.1
Uzbekistan	—	—	—	—

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

Note: ^a 1997, ^b 1996, ^c 1995, ^d 1994, ^e 1993, ^f 1992, ^g 1991, ^h 1990.

sufficiently applied and sometimes not even known. For this reason, re-hospitalizations and extensive hospitalizations for many years or even for life occur frequently, especially in the case of chronically ill patients. These problems emerged from their lack of priority and are maintained by the absence of coordination between health and social care.

Long-term care facilities for the elderly generally have long waiting lists and the quality of the care they provide varies considerably. These institutions are financed from the state budget, not by health insurance funds. If long-term medical care is needed, it is provided in hospitals for the chronically ill which are financed by the health insurance funds. There is, however, a significant gap in services as nursing homes are generally not available. In 1997, the provision of long-term care facilities was opened up to public competition, which is believed to have raised the number of long-term beds to approximately 20 000.

Comprehensive home care (CHC) is an integrated form of care and assistance provided to clients in their own social environments. It was newly introduced in the Czech Republic at the beginning of 1990s. An integral component of CHC is home health care, which, based on established legal norms, is a particular form of outpatient care provided on the basis of the attending physician's recommendation. A further integral component of CHC is social care, provided based on a patient's social diagnosis. The lay public also plays a role in health care and social care, whether it is the patients themselves via self-care, or the participation of family members, loved ones, or volunteers in providing general care and assistance.

Within the CHC framework, there are various forms of local health care, social care, and general care. The extent of activities is determined by the patient's current health condition, the condition of his or her social environment, and the levels of knowledge and competence of individual members of multi-disciplinary teams and home care support agencies. CHC is one of the functional elements of primary care. In this context, primary care is viewed as the first line of contact between the client and the health and social care systems. Consequently, the CHC philosophy is conditioned by the principle of stable bonds and the interaction of the individual with his or her own personal social environment, with an accent on the individual's perception of quality of life.

The number of home care agencies increased from 27 in 1991 to 484 in 1998 (162 in 1993, 261 in 1994, 372 in 1995, 480 in 1997).

There are still some problems providing a comprehensive package of social care, primarily because of a lack of communication among the nongovernmental, governmental and private providers. While there is no clear distinction between the health and social services, these services are financed differently.

Human resources and training

The number of health care workers, particularly physicians, is relatively high. This has contributed to rising health care costs and thus, a strategy to reduce numbers of physicians has been implemented. There are currently seven medical schools, three of which are in Prague at the Charles University. Although there is no *numerus clausus* (i.e. no limitation in number), the number of entrants to medical faculties and nursing training is decreasing and will decrease further in the next few years. While the number of graduating physicians is decreasing after a peak in 1995 (Table 6), the number of practising physicians has risen slowly but fairly consistently since 1991. This increase is, however, much less pronounced than in neighbouring countries. Compared to these countries, the number of physicians in the Czech Republic is average, and remains below the average for the European Union (Fig. 12). On the other hand, it is important to note that the average age of physicians in the Czech Republic is relatively young and that almost two thirds are specialists.

The Czech Republic does not have any visible medical unemployment. Salaries of doctors are twice as high as the average national income, but in all specialties, doctors in private practice earn four times as much. Nevertheless, both physicians and nurses argue for relatively higher incomes. The existing surplus of specialists is intended to be reduced by retraining specialists to work in other specialties such as public health or general practice. This is planned but has not yet been implemented.

The number of working nurses has been stable in recent years but the numbers graduating have risen sharply in the first half of the 1990s (from 0.45 per 1000 population in 1990 to a peak of 0.71 in 1994), before falling back to the old level (Table 6). The total number of nurses per capita is among the highest in central and eastern Europe (Fig. 14) and higher than in most neighbouring countries (Fig. 13).

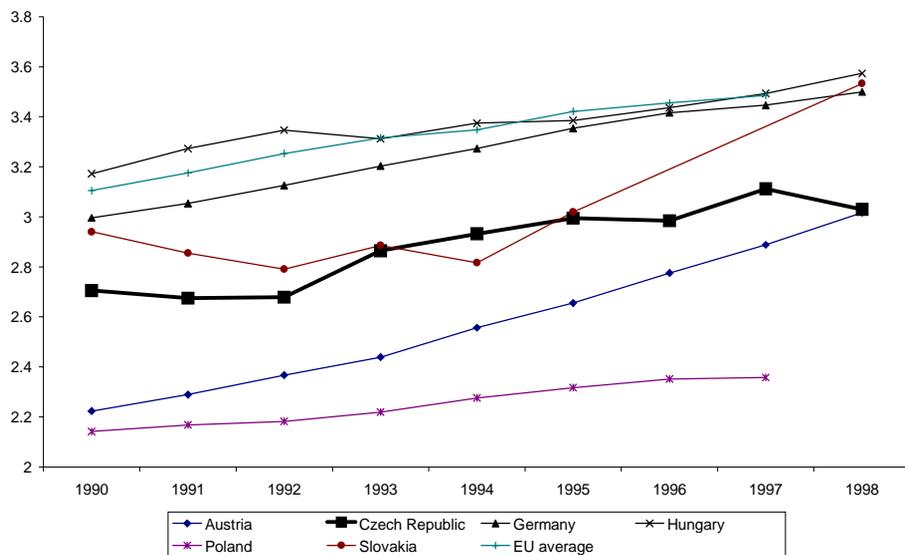
Table 6. Health care personnel, 1980–1998

Per 1000 population	1980	1985	1990	1995	1996	1997	1998
Physicians **	2.31	2.63	2.77	2.92	2.93	2.96	2.96
Dentists **	0.45	0.52	0.54	0.60	0.60	0.60	0.61
Certified nurses **	7.11	7.91	8.40	8.46	8.48	8.38	8.40
Midwives **	0.43	0.47	0.50	0.45	0.43	0.42	0.41
Pharmacists **	0.38	0.39	0.38	0.36	0.40	0.43	0.42
Physicians graduating *	0.14	0.14	0.09	0.14	0.12	0.11	0.09
Nurses graduating *	0.37	0.41	0.45	0.63	0.48	0.43	0.42

Source: The Ministry of Health of the Czech Republic.

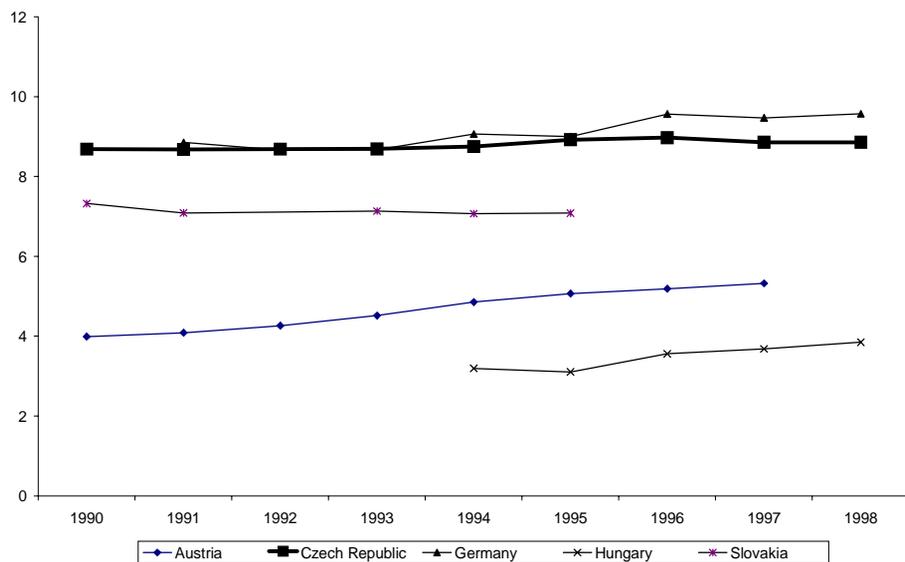
* Natural persons; ** Full time equivalents.

Fig. 12. Physicians per 1000 population, Czech Republic and selected countries, 1990–1998



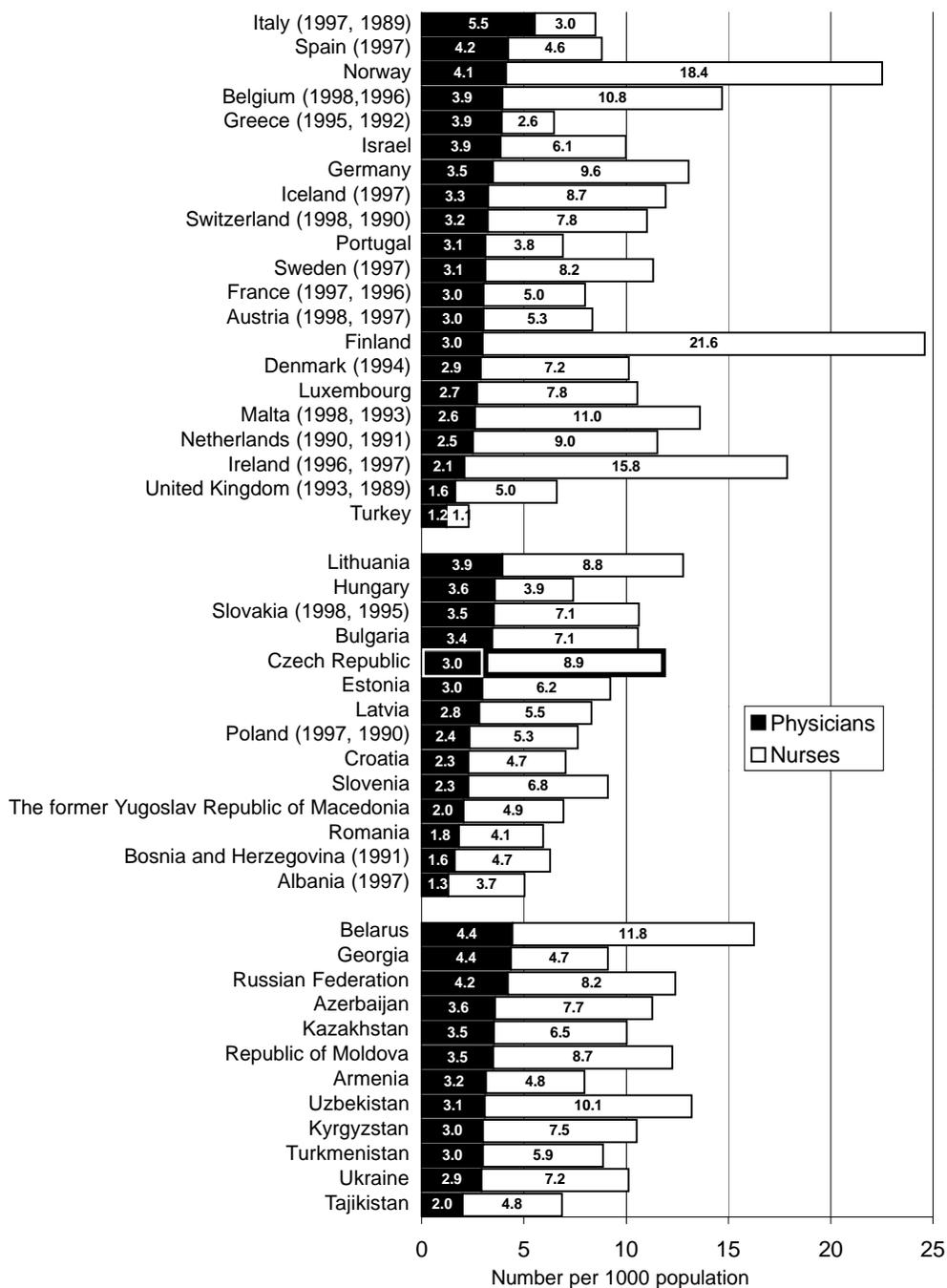
Source: WHO Regional Office for Europe health for all database.

Fig. 13. Nurses per 1000 population, Czech Republic and selected countries, 1990–1998



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.

The geographical distribution of physicians and nurses has been homogeneous across the country for a long time. In the last few years, the situation has become more complicated. Currently, there is an excess of physicians and shortage of nurses, mostly in urban areas. There are differences among medical branches, in rural and urban areas, and in industrial and non-industrial parts of the country. Ongoing reform of health care affects the quantity as well as the structure of health care workers.

There are seven medical and two pharmaceutical faculties in Czech universities. Whereas the Ministry of Education is responsible for the education and training of physicians and nurses towards their degree, the Ministry of Health is responsible for postgraduate medical and nursing education. Universities are gradually implementing curriculum changes in the training of physicians and nurses. More emphasis needs to be placed on general practice and management skills. University medical studies consist of six years of training; dentistry/stomatology and pharmacy are for five years.

There are two specialized institutes for postgraduate education and training of health professionals (Prague, Brno) in the Czech Republic, affiliated to the Ministry of Health. Since 1981, physicians have to complete the first level of specialization before they enter general practice (which takes thirty months). Further specialization after the first level is optional and usually takes usually between three and five years. The Institute for Postgraduate Medical Education (Prague) is responsible for postgraduate specialty training of physicians. The restriction of postgraduate education to a small number of facilities will end when recent legislation is enforced and the process is opened up. Successful accreditation will become the only condition required for the delivery of postgraduate education. Recently, prepared new legislation is predominantly focused on reconciling Czech legal norms and administrative procedures with those of the European Union. These legislative changes are necessary to achieve the free movement of health professionals within the framework of the European Union.

The education of nurses takes place on several levels. Basic education consists of four years of vocational training at a secondary school for nurses (starting at the age of 15). This is divided among several specialties, such as general nurse, laboratory worker (for biochemistry, immunology, pharmacy, etc.) or dietary nurse. There is the possibility of a two-year training programme after graduation from any high school for specialties such as paediatric nursing, midwifery or radiology laboratory work. It is also possible to undergo a two-year training programme at the Health Care Educational Institute (Brno) after graduating from high school. A number of universities offer Bachelor degree courses in nursing, which take three years. There is also a five-year Master of Nursing programme. Until 1998, some nurses completed their university studies

at the Faculty of Philosophy (offering a combination of two subjects, nursing and pedagogy).

Postgraduate specialty education and training of nurses is organized at the Health Care Educational Institute in Brno. Specialization is possible in a number of areas and there is a further two-year course in organization and management.

There are plans to raise the age for entry into nursing to 19 years (after graduation from high school), since girls (the vast majority of nurses are female) who start at 15 years of age often leave the profession. Salaries of nurses have increased significantly since 1990 and, at present, the incomes of nurses are almost the same as the state average for employed persons. Changes to the training of nurses have been limited by fears that there be a shortage of nursing personnel. In general, proposed legislative changes for the education and training of nurses are aimed at ensuring that qualification requirements for Czech nurses are the same or similar as those for European nurses.

Other health care workers (clinical psychologists, speech therapists, physiotherapists, etc.) are educated within specialized university departments. They specialize after graduation in the similar way as physicians, dentists and pharmacists.

Pharmaceuticals and health care technology assessment

The licensing of pharmaceuticals for the sale and allocation of drugs or medical aids to reimbursement categories is carried out by the Ministry of Health in consultation with the Ministry of Finance and the GHIF. The Czech Chamber of Pharmacists and representatives from the health care associations plays a role in this process. In the case of ambulatory care, pharmaceutical products are classified into three categories. The first category is fully reimbursed and includes the cheapest effective preparations (often domestically produced) of all essential drugs. The second and third categories are partly or fully paid for by patients: insurers only reimburse the cost of the generic equivalent. There is also a positive list for hospitals which, it is hoped, will encourage a more rational use of drugs.

Drugs and medical technology are registered with the Drug and Technology Control Institute, which is directly managed by the Ministry of Health. This assesses the costs and benefits of medical technology in a fairly narrow context. Comprehensive and systematic technology assessment is in its infancy. There is no body to evaluate new medical or therapeutic techniques.

Along with spending on pharmaceuticals, purchases of medical equipment have risen in recent years. Between 1991 and 1998, the number of magnetic resonance imaging units rose from 2 to 14 and the number of computerized tomography scanners from 22 to 84. It is not clear if all these purchases were necessary.

In recent years, the Czech pharmaceutical industry has been almost completely privatized. Due to this change, the commercial strategy of these factories and their production methods have changed significantly. Despite price increases, the domestically produced pharmaceuticals are of substantial importance to the Czech health care system. Pharmacists are also predominantly private now, as is the distribution network for pharmaceuticals. At present, there is a limited range of products sold over the counter, but this may become more important in the future.

The problem of the poor supply of pharmaceuticals under the socialist system has largely disappeared and the main difficulty with pharmaceuticals now is cost escalation. The level of consumption of pharmaceuticals has risen slowly since 1991. However, as prices have increased dramatically during the same period, spending on pharmaceuticals has also risen rapidly. Since 1995, pharmaceutical expenditure has represented around 25% of the total health care expenditure of the country. Aside from the categorization of drugs for reimbursement and co-payment, certain other measures have been implemented to control prescription costs. Some drugs may only be prescribed by specialists and there are plans to give information on the costs of induced services (including prescribing) to primary health care doctors, with the possibility of imposing limits or shadow budgets.

Since 1995, a reference pricing system (maximum prices for reimbursement by the health insurance funds) is provided in the Czech Republic. It states that the reimbursement level is calculated on the basis of the amount of substance contained in each pharmaceutical product. The unit cost of each substance is defined by the "drug decree" while the basic principles are laid out by law. The reference pricing system has helped slow growth in expenditure: while the GHIF's per capita spending on drugs had risen by 39% in 1994 and even 43% in 1995, the increase slowed to 13% in 1996 and to a mere 4% in 1997.

The Act No. 48/1997 on Public Health Insurance defines 521 groups of pharmaceutical products which can be reimbursed by the health insurance funds. The ATC grouping and the administering of drugs are used to define the groups. The law defines specific conditions for reimbursement in each group, e.g. the diagnosis of the patient, the specialization of the prescribing physician (e.g. cardiologist, oncologist) or the necessity for approval through the review doctor (which is an employee of the insurance company). The decree No. 57/1997

(the “drug decree”) defines the level of reimbursement of those substances which are covered by law. The decree is updated regularly, every three months until 1999, and every six months from 1 January 2000. The updating changes are based on recommendations from the categorization committee which is an external advisory body of the Ministry of Health. It consists of medical and pharmaceutical specialists, economic specialists from insurance companies, employees of the Ministry of Health and others.

The Ministry of Finance determines both the reference prices and the combined maximum amount of mark-ups by pharmacies and wholesalers after drugs leave the factory (*ex-factory* prices). The maximum mark-up is stated for pharmacies and wholesalers together. On 1 August 1999, this total mark-up was lowered from 35% to 32%.

On the basis of the decree and the decisions of the Ministry of Finance, the GHIF issues a drug list in which every reimbursable pharmaceutical product is enumerated. Also, the reference price, the maximum retail price and other limiting conditions are included.

The health insurance funds themselves also have a role in the regulation of pharmaceutical expenditure: They set spending limits for drugs for each health care provider and impose penalties in case of overspending. Drug usage reviews and new drug-regulating methods are being imposed by some funds in recent months but they have not been common until now.

The current reimbursement system is in full compliance with EU regulations and directives by now (89/105/EEC), but some minor legislative specifications still have to be added. This is being prepared in the new law concerning health insurance, which will be launched during the year 2000.

Further problems concerning pharmaceuticals and some selected solutions are as follows:

1. to reduce drug expenditures – to reveal and eliminate current waste; to keep the increase of drug expenditures within the financial limits of public health insurance incomes;
2. to improve the level of detail of drug categorization;
3. to create a separate system of drug payments for inpatient and outpatient care;
4. to control multiple payments for drugs, especially while patients are in hospitals (i.e. to prevent pharmaceuticals from being obtained on prescription when they are included in hospital reimbursement);
5. to motivate health care providers towards rationalization (e.g. to fix lump sum payments for drugs in hospitals) and limits on ambulatory prescriptions, to introduce positive and negative lists and to establish commissions to monitor the effective use of drugs.

Financial resource allocation

Third-party budget setting and resource allocation

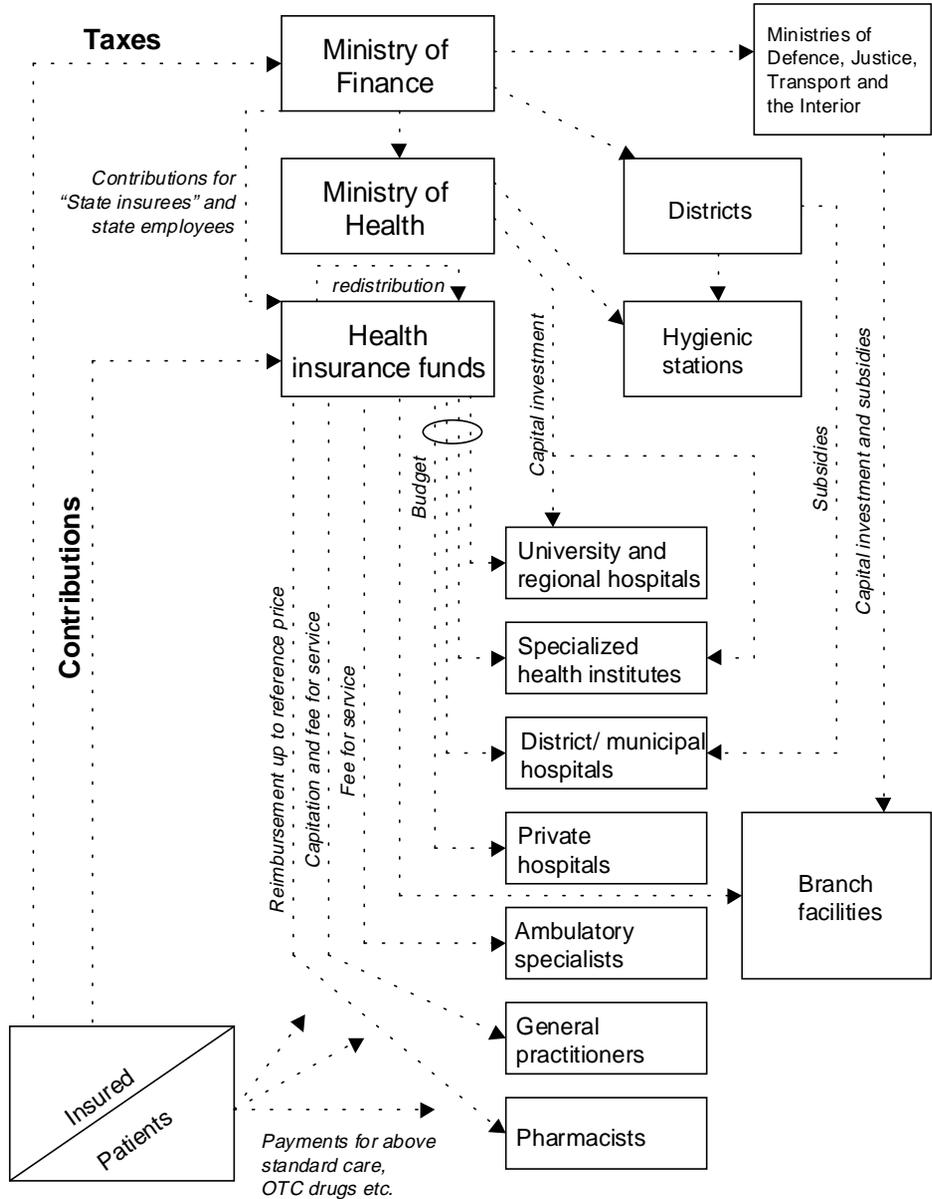
The size of the overall health care budget is determined mainly by the level of personal income of the population, the insured, as funding is a proportion of income. Any remaining costs are covered from state and municipal budgets. One of the most striking features of the Czech health reforms has been the rapid rise in expenditure on health care. This has risen every year since 1990, but especially between 1992 and 1993 following the introduction of the health insurance system (with an approximately 60% per capita increase). After that, the per capita expenditure increased less rapidly but still substantially: e.g. in the GHIF by 36% in 1994, by 21% in 1995, by 14% in 1996 and by 9% in 1997 (1993–97: +105%).

The insurance funds collect and spend around 90% of public financial resources in the health care system, making them by far the most important actors for resource allocation (Fig. 15).

As explained previously, health insurance funds contract hospitals and doctors for the provision of services. The payment for the services was originally on a pure fee-for-service basis, with payments based on the fee schedule which lists a certain number of points per service. The number of points was then multiplied by the monetary value per point to calculate the reimbursement. The monetary value was determined by various factors, i.e. the allowed maximum, the contracted value and the overall level of activity to reimbursed by an individual fund.

At that time, the maximum point value was set by the Ministry of Finance. As insurers contract separately, those with higher contribution incomes were able to offer higher payments per point. This meant that there were incentives for providers to encourage patients to move from one fund to another (i.e. so that they would obtain higher reimbursement levels). But in reality the

Fig. 15. Financing flow chart



differences between insurance funds were not very large, because other funds often copied the value set by the GHIF. For all funds, an increasing level of reimbursed activity led, due to a ceiling on total point-related payments, to decreasing point values.

Until 1994, health insurers did not have the authority to limit the volume of contracted services. They had to contract for an unlimited volume of health services. Therefore, they were not able to act as active purchasers of services but only as passive payers of services delivered by contracted providers. After the 1994 legislation, some volume limitation could be applied but only to a limited extent, on the basis of decreasing reimbursement for services above the set volume (effectively introducing a third factor determining the point value).

This situation changed in 1997 with the introduction of Act No. 48/97 Coll. and additional legislative norms, which more clearly defined the imposition of volume limits in the contracts and permitted the use of payment schemes other than fee-for-service. It also changed the determination of the now uniform point value: it results from the process of joint negotiations between insurance funds and providers but needs the approval from the Ministry of Finance. These were the most important change in health care financing since the establishment of the insurance system in 1992–1993.

In July 1997, the Ministry of Health published a new list of procedures (items of services) with new point numbers. This list met criticism both from providers, who were convinced that the new point numbers would not allow them to cover the real cost of the provided services, and from the insurers as well, who argued that the collected insurance contributions would not be sufficient to cover the supposed volume of the health services, invoiced according to the new point numbers. At present, there are about 4500 different services specified for reimbursement.

The structure of expenditures has been changing since 1993 in relation to:

- a) the extent and reimbursement of “above standard” services by the health insurance fund(s);
- b) the growing number of private providers of all types and the increasing amount of newly acquired technology which led both to an increased supply in quantity and quality of care offered;
- c) the wider availability of imported drugs;
- d) changes in the reimbursement method.

Payment of hospitals

Since mid-1997, hospital inpatient health care is reimbursed according to a budget (or rather budgets, as funds contract hospitals individually) based on the relevant period of the previous calendar year, taking the inflation rate into account. The points from the fee schedule are used to determine the activity of the hospital or, in other words, to evaluate whether an equivalent activity has been delivered for the budget.

The system of budgets developed as a result of some problems with the previous points-based fee-for-service hospital reimbursement system, implemented from 1993 to 1997. Under this system, invoices were submitted to the insurer, containing a patient identification code and a list of the procedures carried out. A total list of up to 4500 procedures was reimbursable with points supposedly based on the amount of time taken to carry out a procedure. Hospitals also invoiced a number of points (multiplied by the point value) for each day spent in the hospital; in addition they received a lump-sum payment for pharmaceuticals. The value of points was calculated as follows: direct charges for materials were reimbursed first and the remaining funds were divided by the total number of points. The value of a point was the same throughout the country, but as calculations were carried out separately for each health insurance fund, point values could vary from one fund to another.

This system had shortcomings: it stimulated considerable growth in services provided by hospitals (as well as in ambulatory care facilities). It overvalued certain specialties – e.g. invasive specialties such as orthopaedics, ophthalmology – relative to others. In addition, there was no allowance for the fact that some providers faced higher labour costs than others (especially in Prague). As it also did not encourage a decrease of hospital length of stay, per diem payments were changed to a decreasing scale from the end of 1994. While the GHIF's per capita expenditure for inpatient care increased by 51% between 1993 and 1997, the increase was not as rapid as that in other sectors.

Under the former fee-for-service system and the current budget system, the reimbursement payments are supposed to cover operating costs and include a depreciation allowance to finance capital expenditures. The capital investments of university and regional hospitals, however, are funded from the state budget and many district hospitals receive support from the municipalities. These sources of funding are available only to public sector institutions. If the privatization of health care facilities is to continue, an important challenge for the future will be to allow investments by all health care providers to take place under equal conditions.

A combined daily charge incorporating diagnosis-related groups (DRG) for hospital care is being considered to address some ongoing problems and may be introduced in the future. Currently, a DRG experiment is being conducted in 19 Czech hospitals.

Payment of physicians

There is a clear division in earnings between physicians in private practice and those employed by the state. The latter, mostly working in state-owned hospitals, are salaried and earn a salary which is above the Czech average. Physicians in private practice are paid according to the services they deliver. Originally, this was totally on a fee-for-service basis, as described above. Since the total amount of money available was limited, more services meant less reimbursement per service. In order to compensate for decreasing reimbursement rates, physicians, in turn, increased the number of services delivered (which lowered the reimbursement even further), especially those of specialists. From 1993 to 1997, GHIF's per capita expenditure on general practitioners (GPs) increased by 31% and the increase for ambulatory specialists was 258% (which was not explained by fewer ambulatory services delivered by hospitals as outpatient expenditure per capita also rose by 67%).

To break this vicious circle, in 1997, the Ministry of Health and the GHIF prepared and introduced specific measures for general practitioners and for specialists.

For general practitioners, capitation fees per patient were introduced. These are differentiated into 18 groups by age but not by sex; e.g. 0 to 4-year olds have an index value of 3.8; 20- to 24-year olds of 0.9; 60- to 64-year olds of 1.5; and persons above 85 years of 3.4. The number of patients per physician is equally limited and exceeding that limit means smaller per capita payments. In addition, some services of general practitioners continue to be paid under the fee-for-service system (comprising approximately 30% of their income), e.g. preventive examinations, visits in patient's homes, etc.

For services by ambulatory specialists, a system of lump sum payments up to the level in the relevant quarter 1996 (increased by inflation rate) – similar to that of hospitals – was introduced into the system for the second half of 1997. Receipt of the total 100% lump payment was dependent on a performance level of at least 70% volume of the health care supplied in the same quarter of the preceding year. This condition had been imposed by the insurers based on Ministry of Health information, according to which 20–30% of the

provided health services were unnecessary, having been supplied just as a “hunt for points” and profit increase. The data, indeed, showed that in the second half of 1997, the volume of services dropped by approximately 20%.

In January 1998, the system of reimbursement for specialized ambulatory services was changed again and a fee-for-service system was re-introduced. There are now, however, limits on the volume of services so that specialists are not reimbursed without limits. Additionally, the monetary point value for reimbursement depends on the number of hours worked, e.g. while up to 9 hours daily give 1 CZK per point, this amount decreases to 0.8 CZK if the working time is up to 12 hours (in 1999).

In contrast to office-based specialists, hospitals and other bed health care facilities are reimbursed for outpatient health care services by lump sum payments.

Since July 1997, dental/stomatological services are reimbursed according to a special price list. The individual items of services are calculated directly in Czech Koruna, not in points. Some of their procedures are aggregated. Procedures using materials above standard are entirely paid by the patient; in this case, insurers do not reimburse the standard prices of the procedure or the value of the standard material.

In sum, above-mentioned changes in reimbursement of general practitioners, ambulatory specialists as well as hospitals from mid-1997 altered the incentive structure for health care providers. The change removed the tendency for unnecessary, exaggerated care and procedures for each individual patient. In fact, the new reimbursement schemes motivated some physicians to minimize care. The idea that some patients are treated “free-of-reimbursement” (after the physician’s “time-limit”) still exists in the mind of these physicians. However, it is important to note that total amount of financial means has not changed and for several groups of doctors it has even increased.

Health care reforms

Aims and objectives

The transformation of the health care system has been part of a general metamorphosis of the whole Czech society after the revolution in 1989, as mentioned in the *Introduction*. Reforms in health care were initiated by a relatively small group of health care workers, both physicians and other professionals (e.g. psychologists, sociologists, etc.). This group opened the debate on health care delivery and was supported by the other health care workers. Some of these people achieved important positions in the Ministry of Health in 1990 and, since then, the Ministry of Health has been very active in the process of reform. Unfortunately, the Minister of Health has changed eight times since 1989 which has altered the direction and dynamics of reforms. There is evidence of widespread public support for changing the previous health care system. In a 1990 survey, 70% of the population endorsed privatization of primary health care as a means of improving quality.

An important factor for health care workers was dissatisfaction with their social status and income. Up until now, the incomes of health care workers have more or less kept pace with inflation, but compared with the rapidly growing personal incomes in other parts of the economy, this situation is still perceived by health care workers as unsatisfactory.

Other key aims of the reforms have changed since their beginning in 1990. The first programme set only tentative aims: de-monopolization, decentralization and liberalization. These aims were further elaborated into five main directions:

- creation of new health care actors
- remodelling of the structure and organization of health services
- changes in financing
- transformation of the ownership of health care facilities
- reform of the education of health professionals.

In 1994, the Czech Ministry of Health proclaimed more concrete objectives, building on those changes already achieved. These included:

- raising the quality of care
- improving availability and personal responsibility in health care
- increasing micro- and macro-efficiency
- completing the legislative and institutional conditions for health care.

Between 1992 and 1994, it is fair to say that health services were not the most urgent priority of the government. This situation changed in 1994: health care workers became unhappy with their status and salaries and were able to push health care higher up the political agenda, and in 1996 they went on strike.

In order to compensate for decreasing reimbursement rates per service under the fee-for-service system, physicians increased the number of services delivered. This development culminated in a “point inflation”. This led to changes in the reimbursement system through a new law in mid-1997: 1) budgets for hospitals; 2) a combination of capitation and fee-for-service payments for general practitioners; and 3) time and service limits for ambulatory specialists. At the same time, cost-containment policies also focused on the number of health care providers. From the beginning of this period, new regulatory mechanisms were added, such as public competition “tenders” for acute and chronic hospital care. These are carried out on the central level through negotiations between the Ministry of Health, the health insurance funds, the Czech Medical Chamber, the Czech Medical Association, hospital associations and the relevant health care providers. It is proposed that the next step in these public competition tenders – focusing on the network of ambulatory health care special services and primary health care – will be negotiated at the district level in the near future.

At present, one of the most pressing problems of the Czech health care system is the financial deficit, which is highest in large hospitals. Another problem to be solved is the perceived oversupply of ambulatory specialists which has to be solved through a sensible reduction of their number. The problem of salaries of health care professionals, especially of physicians, has not yet been solved, and is still under discussion.

Another issue is the problem of cost-containment. Solutions being implemented include a special body for the supervision of health insurance funds, a new system of reimbursement for health care services, setting criteria for the size of clinical practice, a new drug policy, etc.

There is also the issue concerning the education and training of health care professionals. New programmes for nurses are still under development and

there are ongoing discussions regarding the high number of medical schools in the country. Graduate specialty training is being reorganized according to the newly-prepared Law on the Training of Health Care Professionals.

Finally, it can be seen that health care reform has lost its original high momentum. This has been influenced by a number of internal and external factors over the last three years, mainly caused by a general lack of consensus. After almost ten years, the health care reform process could be completed through legislation in the area of professional education and public health, as well as by amending the Drug Policy Act and the Health Insurance Act. In addition, the patient's place in the health care system needs to be a continuous focus for all stakeholders. Patients' rights need to be discussed in more detail and implemented into the system.

Reforms and legislation

The 1966 Law on Health Care for the Population remains the fundamental piece of health care regulation. It has been changed and amended by a series of health care reform legislation, some of which actually established new laws, while others are mainly amendments and changes to existing laws. The more important pieces of legislation are (in chronological order) as follows:

- 1991 General Health Insurance Law (Act No. 550/91 Coll.)
- 1991 Law on the General Health Insurance Fund (Act No. 551/91 Coll.)
- 1991 Law on the Medical, Dental and Pharmaceutical Chambers (Act No. 220/91 Coll.)
- 1991 Resolution of the Czech Government – Health Care Order
- 1992 Law on Branch, Local and other Health Insurance Funds (Act No. 280/92 Coll.)
- 1992 Law on Non-State Health Care Facilities (Act No. 160/92 Coll.)
- 1994 Resolution of the Czech Government – Health Care Order
- 1995 General Health Insurance Law (amending the previous General Health Insurance Law)
- 1996 General Health Insurance Law (again amending General Health Insurance Law)
- 1997 Law on Public Health Insurance (Act No. 48/97 Coll.)
- 1997 Law on Drugs (Act No. 79/97)

- 1998 Law on Narcotic and Psychotropic Substances (Act No. 167/98 Coll.)
- 1999 Law on the Health Insurance (Act No. 106/99 lifting the original limitation of Act No. 48/97 Coll. to two years, i.e. making it indefinitely valid).

Health for all policy

The health for all strategy is being accepted step-by-step in the Czech Republic. In April 1992, the former government discussed and approved the principles of health protection and promotion, based on the health for all strategy. The government then decided to work out a National Programme of Health Promotion. However, there were some reservations concerning the programme. Many local activities have emerged in the last few years, for example national networks of Healthy Cities and Health Promoting Schools. In 1994, work on the National Programme of Health Promotion (based on the health for all strategy) was completed, and in 1995 the National Health Board, chaired by the Minister of Health, was nominated on the intersectoral (interministerial) level. There is an annual competition for the financing of health promoting projects from the budget of the National Health Programme, under the control of the Chief Hygienist.

In December 1998, the Czech Government approved the National Environment and Health Action Plan and in April 1999, the National Environment and Health Board, chaired by the Minister of Health, was nominated as an interministerial body for action.

In September 1999, at the 49th WHO Regional Committee for Europe in Florence, the Czech Republic informed the committee about the schedule of implementation of Health21: health for all in the 21st century. A Czech version of the Health21 document is published as information to health professionals, politicians and the public. The Health21 strategy will be a consistent part of a new national health policy and will be implemented at regional as well as local levels. In the first half of the year 2000, the strategy will be submitted to the Czech Government and the Czech Parliament.

The WHO Liaison Office in the Czech Republic is coordinating the important, but difficult process of the Health21 implementation at national, regional and local levels in the Czech Republic.

Reform implementation

From the early 1990s, considerable changes have been implemented in the Czech health care system. The majority of the planned changes have taken place and the implementation process has been remarkably smooth. A complete reconstruction of the health care facilities and authorities has been achieved and a health insurance system has been created. A Medical Chamber, Stomatological (Dentists') Chamber and Pharmacists' Chamber were established and there was a re-emergence of medical professional societies, associations of societies of nurses and other health care professionals. A new system of home care has been established. At the same time, there was an almost complete privatization of primary health care, the pharmaceutical industry, pharmacies, health care supporting firms, spa facilities, etc.

Liberalization opened the door to a rapid introduction of a new system of health care financing and to the start of privatization. In 1992, the health insurance system was adopted as the principal means of financing health care. The GHIF and, subsequently, branch and local health insurance funds were established. There were up to 27 health insurance funds at one period in the mid-1990s; at the beginning of 2000, the number had now decreased to nine. Both the state and private health care facilities increasingly contracted with health insurance funds, with payment from the outset on a fee-for-service basis. For payment purposes, an extensive list of health care procedures was created and it is continually amended by negotiations among legally nominated partners. Not all of the reforms have been successful. Some were controversial and today the Czech health care system is facing a number of problems resulting from the process. One of these is over-utilization of services.

Throughout recent history, health care workers have continuously expressed frustration with their relatively low income. As a result, they have had very high expectations of the reform. When policies did not have immediate financial effect, they became sceptical and frustrated. Thus, physicians have resisted plans to reduce the numbers of doctors or hospital beds, which has posed a difficult problem for the government.

At the beginning of the second half of the 1990s, these problems suggested the need for new regulatory mechanisms following the period of rapid liberalization. There had been a gap between the development of the Czech health care reform and the beginning of regulation of this newly-adopted and implemented system, particularly in the field of health care financing. It took almost five years to react: simple fee-for-service payments in primary health care were

combined with capitation fees, a new mode of payment for hospitals was introduced and the fee-for-service payments modified for ambulatory specialists. The Act No. 48/97 which enabled these changes was originally limited to two years but this limitation was cancelled through the Act No. 106/99, i.e. the 1997 law remains in force.

However, changes in the payment methods are not the only innovation: quality assurance, accreditation procedures and technology assessment will play an important role in the future Czech health services. However, their implementation is falling behind original expectations.

Despite the overall success of implementation, some health care legislation has only been partially implemented. A national health information system is not yet fully established and neither the privatization of smaller hospitals nor that of various auxiliary laboratories has been completed. Along with this remains a number of urgent tasks for the near future. These include the establishment of a new public health system, implementation of quality assurance and accreditation procedures, systematic technology assessment measures and the reform of postgraduate medical education.

Conclusions

The health care system of the Czech Republic has undergone considerable and rapid change in the last ten years. The aims of the reforms have evolved, as their effects have been felt throughout the health care system. The pluralist insurance system may have compromised the equity of health care financing by putting a ceiling on payments and by allowing some insurers to be better funded than others. But in terms of provision, despite the initial possibility that the better-off insurers might offer more services to their members, the whole population is still covered for virtually all their medical needs.

Looking back, the problems of the late 1980s could be compared with today's problems to analyse what happened in the last decade. In 1989, a humanization as well as a democratization of the health care system were considered to be the important issues. It was necessary to find resources as well as tools for the effective allocation of these resources. The chosen tools, such as fee-for-service reimbursement, were expected to strengthen the efficiency of the system. Another important and integral factor of the proposed changes was to raise the social status of the health care professionals.

The system of general health insurance brought money to the system but it was used in combination with questionable financial incentives and without appropriate procedures for technology assessment or for steering the rational use of technology. That is why the original objective to improve both macro- and micro-efficiency in the system remains high on the agenda. It is in this area where there have been and it is likely for there to be the greatest problems.

The incentives offered by the original reimbursement system favoured high levels of activity. At the micro-level, individual physicians had to increase the number of procedures constantly in order to maintain their incomes. The hospitals were faced by a similar situation. The lack of an efficient gatekeeping system at primary health care level and the presence of large numbers of ambulatory-based specialists encouraged overuse of specialists rather than generalists. A number of solutions has been proposed, e.g. gatekeeping by

general practitioners, DRG payments for hospitals, and reductions in numbers of physicians. The DRG systems may prove too complex to monitor and gate-keeping alone is unlikely to be sufficient to control access to secondary care.

Other solutions have already been implemented, e.g. changing the reimbursement system for primary health care doctors and decreasing the number of acute hospital beds. However, there still is a large number of hospital beds in the country inappropriately devoted to acute instead of long-term care. In addition, the extension of the health care network has been stopped until an assessment of the number of providers needed has been carried out. As there is a comparatively high number of physicians, especially specialists, per capita, an actual reduction in their number might have a significant impact on efficiency, but it will also be difficult to implement. Related to the problem of the number of specialists is the one of insufficient planning for high-technology equipment as there are few controls on capital investment.

The social status of health care professionals has increased, but the economic position of health care professions is still not comparable with physicians in neighbouring European Union countries, such as Austria or Germany.

Consumer choice has been well served, at least in part, by the reforms. Patients may choose their doctor and, as many physicians are in private practice, there are incentives for doctors to satisfy their patients, although they have been weakened though through the cost-containment efforts since 1997. Unfortunately, consumer choice is often based on a misunderstanding, as patients still seem to equate more with better: more medications, more diagnostic and therapeutic procedures and higher expenditure. Consumers have little collective voice in the health service although there is employee representation on the boards of the insurance funds.

The quality of care may well have been improved by the reform process, but again the picture is not complete. There is a strong suggestion that there has been, at least until 1997, over-utilization of health care and this does not constitute high quality care. With health care expenditure being driven both by the system's structure and incentives as well as by physician behaviour, a fee-for-service system requires an especially high degree of professional regulation in order to avoid inappropriate care. There has not yet been enough time for a culture of close professional regulation to be developed and the organizational structures to enforce such a system have not yet been implemented.

While the effect of the reforms on health gain is difficult to gauge as health status is closely correlated with the wider socioeconomic picture in the country, the rapid decline in infant mortality strongly suggests a positive impact of the post-reform health care system. The proposed National Health Programme

(1990–1992 the “White” and the “Yellow” book) was, however, never fully implemented at national or sub-national levels.

In summary, the Czech health care system has evolved rapidly in the past few years. To date, its achievements have outweighed its mistakes. As a result the health care system is facing not only a new set of challenges, but also long-term problems which have to be solved creatively and dynamically, without any prejudices and with an emphasis on consensus building in health policy.

The most important issue for the coming period is to solve problems systematically, contrary to the former prevailing single problem-oriented approach. During the last decade, the situation was complicated by a lack of communication among health policy-makers, health care providers, health insurance fund representatives, representatives from various professional associations, patient associations and the public.

The next steps of the reform should focus on priority problems: the need to create both national and regional health policies, including a division of responsibilities; the development of necessary legislation; harmonization with the European Union; and more appropriate financial solutions (especially targeting remaining deficits) for the health care system.

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