European Observatory on Health Care Systems

Health Care Systems in Transition

Slovakia





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

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

Administrative support, design and production of the HiTs has been undertaken by a team led by Phyllis Dahl and comprising Myriam Andersen, Anna Maresso, Caroline White and Wendy Wisbaum.

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Introduction and historical background

Introductory overview[1]

The Slovak Republic is located in the very heart of Europe, covering 49 035 km^2. It borders with the Czech Republic to the west (251 km), Poland to the north (547 km), Ukraine to the east (99 km), Hungary to the south (669 km) and Austria to the southwest (106 km). It is mostly mountainous with a mixture of continental and oceanic climates characterized by four distinct seasons. Bratislava is the capital of the Slovak Republic.

In 1998, the population of the Slovak Republic was 5.39 million with a population density per square kilometre of 109.9. The Slovaks accounted for 85.6%, Hungarians 10.5%, Gypsies 1.7%, Czechs, Moravians and Silesians for 1.1% and others for 0.4% (*20*). According to the 1991 census, 60.4% of the population were Roman Catholic, 6.2% were Slovak Evangelic Lutherans and 3.4% Greek Catholic. Approximately 17% did not specify their religion.

The Slavic tribes from which the Slovaks derive their ethnic origin settled in the area of the current Slovak Republic in the fifth and sixth centuries (*10*). The Great Moravian Empire (833–907) was one of the most important cultural, historical and political milestones of Slovak history. After its collapse, Slovaks became part of the Hungarian Kingdom for almost a thousand years. In 1918, after the collapse of the Austro-Hungarian Monarchy, Slovaks and Czechs created the Czechoslovak Republic. In 1939, the first Slovak Republic was created under pressure from Hitler. In 1945, the Czechoslovak Republic was restored. The communist assumption of power in 1948 affected the development of Slovakia for more than forty years. The efforts to reform the totalitarian communist regime in 1968 were ended by the invasion of the troops of the Warsaw Pact. The change of the Czechoslovak Socialist Republic into the Federal Czech and Slovak Republics in 1968 followed by the period of

[1] This part was prepared based mainly on the documents of the Ministry of Labour, Social Affairs and Family, Statistical Office of the Slovak Republic and the UNDP.

Fig. 1. Map of the Slovak Republic[2]

Source: Central Intelligence Agency, The World Factbook, 1999.

normalization had more symbolic than practical significance for Slovakia. The so-called velvet revolution in November 1989 led to the fall of the communist regime. Political, economic and social reforms towards a democratic market-oriented economy were accompanied by efforts of Slovakia to gain more economic and political autonomy. In September 1992, the Constitution of the Slovak Republic was adopted followed by the constitutional division of the Czech and Slovak Federal Republic into two independent successor countries on 1 January 1993.

Today, the Slovak Republic is an independent state with parliamentary democracy. The National Council of the Slovak Republic (parliament) has a single chamber of 150 members. The current President, Rudolf Schuster, was elected in 1998 for a period of five years, in the first direct presidential election in the history of the Slovak Republic. He appoints and dismisses the Prime Minister and other members of the government. The present government has four vice-primeministers and 15 ministers. It represents a broad coalition supported by a constitutional majority in the parliament. From the 1998 election, six parties are now represented in the parliament, four of them supporting the

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

coalition government and two in the opposition. The structure of the political party system has not yet been completed.

Since 1996, the Slovak Republic has been administratively divided into eight regions and 79 districts. The state administration operates mostly at regional and district levels. The heads of the regional offices are directly appointed by the government. The system of municipalities as self-governing bodies at local level was reinstalled after 1989. The mayors and members of municipal councils are elected directly in local election for four years. There are 2879 municipalities in the Slovak Republic, including 136 towns and cities.

In 1991, a radical transformation of a centrally planned and controlled economy towards a free market-oriented economy started with four introductory steps: price liberalization, internal convertibility of the currency, a policy of macroeconomic stabilization and extensive privatization. After a severe downturn at the beginning, the Slovak economy developed relatively well. In 1997, real GDP per person in US $PPP reached 7910. The 89% change of GDP between 1989 and 1997 shows that the Slovak Republic is one of the most dynamically developing economies among the countries in transition in the 1990s. The private sector has become a major contributor to GDP with 82.4% at current prices in 1998 in comparison with 26.6% in 1991. The share of services represented 46.3% of GDP, industry 26.7% and agriculture only 4.4% (*22*). The inflation rate decreased from 25.6% in 1993 to 5.6% in 1998, and unemployment from 14.4% in 1993 to 11.6% in 1997 (*20*). Recently, however, the economic situation has worsened. Unemployment has grown rapidly since 1998 (13.67%), exceeding 25% in some districts. The international debt of the Slovak Republic increased from US $6.3 billion in 1996 to US $17.6 billion in 1998. The state budget deficit has increased to Slovak Koruna (SKK) 36.9 billion in 1997 in comparison with SKK 8.3 billion in 1995 due to low revenue income and increased financing of budgetary expenditures under short terms and with onerous funds. According to a UNDP report (*22*), the recent economic problems might be caused by inadequate state intervention in the economy, a strong influence of interest groups over economic policy, low transparency, insufficient application of the instrument of bankruptcy, the lack of foreign direct investments and political instability. The Slovak Republic is still in a stage of change, where the political environment significantly determines the socioeconomic development in the country.

Transformation of the social sphere has been aimed at a shift away from a paternalistic social state policy based on comprehensive social security scheme to systems of social insurance, state social support and social assistance. In 1993, the National Insurance Agency was established covering social, sickness (i.e. sick pay) and health insurance systems. In 1995, the health insurance system

separated from the social and sickness insurance. Since 1996, the latter two have been administered by the Social Insurance Agency. In 1996, a voluntary complementary pension insurance scheme was introduced. In 1998, a new Act on Social Assistance was passed, substantially limiting state benefits and their recipients (*18*).

The Human Development Index (HDI) recorded a gradual growth in the Slovak Republic from 0.803 in 1990 to 0.813 in 1997, the third highest index of all CEE countries (*23*). The HDI increase has been mainly a result of dynamic GDP growth and a slightly increase in life expectancy (*22*). The adult literacy rate has been maintained at 99% for many years.

Life expectancy at birth has improved for women from 74.3 years in 1980 to 76.7 years in 1998 and for men from 66.8 years in 1980 to 68.6 in 1998. These health indicators are higher than in most countries in central and eastern Europe, but are still four to six years lower than in the EU countries. The non-communicable diseases due to unhealthy lifestyles – such as sedentary lifestyle, unhealthy diet, smoking and bad stress management – represent the major health problem in Slovakia. The major causes of death are cardiovascular diseases (579.9 cases per 100 000 population in 1995) accounting for more than half of all deaths. This indicator was two times higher than the EU average (289.1 cases per 100 000 population) with a negative trend since 1990. Cancer is another major health problem – accounting for 222.9 cases per 100 000 population in comparison with the EU average of 194.9 cases per 100 000 population in 1995. Although infant mortality (8.8 per 1000 live births in 1998 compared with 20.9 in 1980) and maternal mortality have shown dramatic improvements, they are still higher than in the EU countries. Communicable diseases are well under control in the Slovak Republic, and the immunization rate has been maintained at high levels (95–99%) for many years.

Historical background

By the end of the nineteenth century, the Austro-Hungarian monarchy had passed the first acts on social insurance covering accident and sickness insurance for certain groups of the population. After the creation of the Czechoslovak Republic in 1918, the Bismarck type of health care system based on social insurance was further developed. Based on the Act No. 221/1924, sickness insurance became compulsory for wider groups of the population. However, it was still restricted to employees in privileged services and in certain high-risk occupations (e.g. miners). Others, such as peasants or the unemployed, remained

excluded. The sickness insurance scheme included only curative medical services to be reimbursed. In addition, the various insurance funds differed for the different groups, both in terms of contributions and services covered. Some funds, mostly profession-oriented, owned their health care facilities. An additional system of private health care providers, mostly family doctors, rendered their services for direct payment. In parallel, the system of public health services was built up to combat infectious diseases and other public health problems. However, it did not receive appropriate political and financial support. In general, the quality of medical services and their accessibility were dependent on ability to pay. The Act No. 221/1926 widened the social insurance system to include disability and pension benefits.

After 1948, radical changes occurred in the health system. All health care facilities were nationalized and became the ownership of the state. The Act No. 99/1948 on national insurance unified all types of insurance, e.g. sickness, disability and pension. It was a start of the transformation of the health system into a soviet-type system. Based on the Act No. 103/1951 on Unified Curative and Preventive Care, outpatient and inpatient services were integrated into hospitals with polyclinics. Based on soviet experience, the Act No. 4/1952 on Hygienic and Anti-epidemic Care was adopted which established *hygienic stations* and research institutes, and introduced doctors-hygienists. It was a priority to improve health statistics and health education services. A system of so-called chief experts of the Ministry of Health was introduced for important medical branches. These new elements were further developed and some of them have survived until now, as shown later. The new system of health care covered over 95% of the population (*7*). During the 1950s, significant success was achieved in controlling infectious diseases, particularly tuberculosis.

The Act No. 20/1966 on Health Care for the Population was another important milestone in the development of the socialist type of health system. The insurance system was replaced by general taxation. The state took over responsibility for financing and managing the provision of health care. All health services, including drugs and medical aids, became free-of-charge for all citizens. The organization and structure of the health system was further unified. The heath care facilities providing health care, hygienic stations and other health institutions were integrated into the hierarchical structure of the regional, district and local national institutes of health. This represented a vertical and horizontal integration of all health services. At local level, health centres were created by a team of health professionals: a "territorial" physician and a nurse for adults, a paediatrician and a nurse for children (up to the age of 15 years), a gynaecologist and a nurse for women, and a dentist with a dental assistant. Doctors for adults had to pass a specialization exam in internal

medicine or surgery. They served a population of 3200–3800. The inhabitants were assigned to their primary health care physicians according to their residency. The health centres, together with hospitals with polyclinics of type I, formed a local institute of national health providing basic health services for a population of 30 000–50 000. The hospitals assigned as type I had four departments: internal medicine, paediatrics, gynaecology and surgery. Other services were provided by the hospitals with polyclinics of the higher type II. Along with 3–4 local institutes of national health and a district hygienic station and other specialized health institutions, they formed the district institutes of national health. The latter provided the comprehensive health services for the population of 150 000–200 000. Three regional institutes of national health completed the hierarchical organization of integrated health care provision. The hospitals assigned as type III provided highly specialized services for a larger population, 1–1.5 million inhabitants. This also included teaching hospitals (*11*). The state allocated financial resources to the national institutes of health through the district and regional national committees based on the state plan for the development of the national economy. This was the only source of income for the health care facilities.

In 1968, when the federal organization of Czechoslovakia was adopted, the Ministry of Health of the Slovak Socialist Republic was established. Its task, however, was to ensure the unified provision of health care services. The basic principles of socialist health care were: state responsibility and ownership of the health care system and care for health of the whole society; unity of science and practice; planning; unified system of the provision of health care services; a focus on prevention; universal coverage and free-of-charge access to services; and active participation of the citizens in health protection.

The scarce resources from the state budget allocated to the health sector were not sufficient to cover all needs of health care providers. Although, according to the literature, the State allocated 5% of its budget to the health sector, lack of transparency in allocation of resources resulted in overall lack of necessary capital investments, with equipment and facilities becoming obsolete, lack of some drugs, low salaries of health personnel and an inequitable development of health services. As the indicators of success of the socialist health system were numbers of graduated physicians and nurses as well as hospital beds, a massive construction of hospitals was observed from the 1960s. This resulted in an oversupply of health personnel and a dominance of hospital care with the so-called specialist culture prevailing. Patients tended to be over-hospitalized for routine conditions and became a passive object of the health care services. In contrast to the commitment of the state to preventive care, the primary health care providers suffered the most. This resulted in a low social

status and morale of health personnel and an overall low prestige of the health sector. In addition, state paternalism in health care resulted in a passive attitude by people towards their own health. Although the system provided universal coverage of free-of-charge comprehensive health services, this did not result in desirable outcomes in health status of the population. For example, the gap in life expectancy between the Slovak Republic and the western European countries has increased since the middle 1960s, mainly due to noncommunicable diseases.

The radical political, social and economic changes triggered in November 1989 in the whole Czechoslovakia also brought about reforms in the health sector. After 1989, development of the health systems in the Czech Republic and the Slovak Republic began to differ.

Organizational structure and management

The Constitution of the Slovak Republic lays down the basis for the organization, management and financing of the health care system in the Slovak Republic. It ensures universal coverage and access to free-of-charge health care services through compulsory health insurance. The latter has been built up on the principles of solidarity and plurality. In addition, the Constitution provides everybody with the right of protection of his/her health. Thus, although the principles of universal coverage of comprehensive free-of-charge services laid down in 1966 remained the same, the organizational structure, management and financing have changed substantially during the health system reforms launched in the early 1990s. Their impact on health and health care provision will be discussed below.

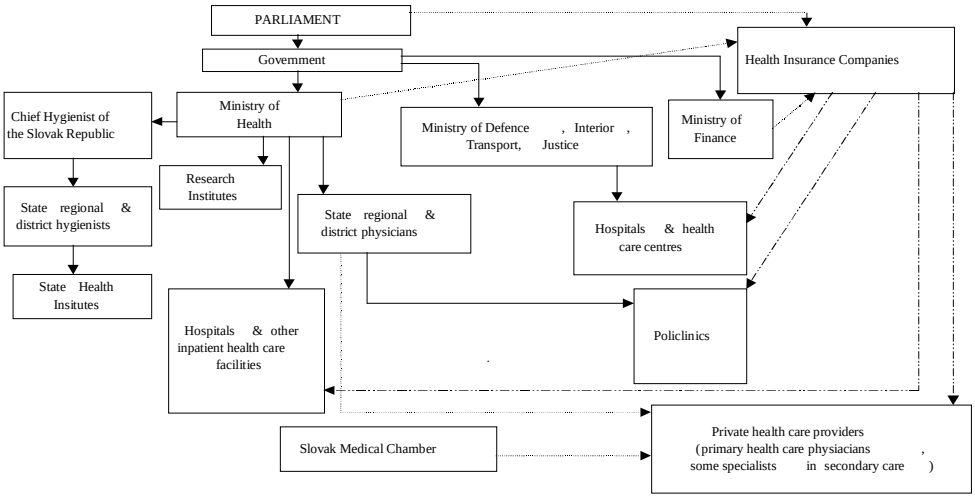
Organizational structure of the health care system

The organizational structure of the health care system has radically changed. The integrated three-tier hierarchical organizational structure consisting of local, district and regional institutions was abolished. The provision of health care has become fragmented based on the separated health care providers operating alone. The links between primary health care providers and secondary health care have been weakened. The organization of the current health care system is a mixture of decentralized and centralized structures (Fig. 2).

Ministry of Health

Despite the intention to transform the Ministry of Health (MoH) into a body focusing mainly on the development of health legislation, standards and norms, its functions are changing slowly.

Fig. 2. Organizational chart of health care system



The Ministry of Health is the main state executive body responsible for health care and health protection. It proposes the principal directions and priorities of the state health policy, and prepares and submits the appropriate draft legislation to the government.

Based on the Act on Health Care, the Ministry of Health is responsible for regulation of the health care providers to ensure equitable access for everybody to health care services. Until 1996, it issued licences for all non-state health care providers, after which time this task was delegated to the regional state physicians.

The Ministry of Health has to control the health insurance companies, including issuing or withdrawing permits to operate health insurance companies. Since 1999, the Ministry of Health is responsible for maintaining the Central Registry of the Insured Persons. Prior to this, the Central Registry was maintained by the General Health Insurance Company (GHIC).

The Ministry of Health still owns, runs and controls almost all inpatient health care facilities with the authority to appoint and dismiss their directors. It issues guidelines on the construction of health care facilities and approves the use of expensive medical technology and equipment. It is responsible for capital investments in the health care facilities owned by the state.

In addition, the Ministry of Health is responsible for postgraduate and continuous education of health personnel and the secondary education of health

personnel. It still owns, runs and controls the secondary nursing schools. The Ministry of Health also owns the Slovak Postgraduate Academy of Medicine. The transfer of ownership of the postgraduate and continuing education of health is still under discussion.

Through its chief hygienist, the Ministry of Health develops and implements measures and activities to ensure control and surveillance of communicable diseases, safety of food, safe and health working and living conditions, and other public health functions regulated by the Act on Health Protection. It owns and runs all state health institutes implementing measures and activities to ensure the health protection of the population.

Through the Inspectorate of Spas and Springs, the Ministry of Health defines measures to protect and make effective use of natural curative spas, springs and mineral water.

Finally, the Ministry of Health owns, runs and controls other health institutes, such as health research institutes: the National Centre for Health Promotion; the Slovak Medical Library; the Institute of Health Information and Statistics, and the State Institute for Drug Control. The directors of these institutions are directly responsible to the Ministry of Health.

Other ministries

The Ministry of Health closely cooperates with the Ministry of Finance in carrying out state control over the health insurance companies. The Ministry of Finance issues pricing decrees in relation to health services, drugs and medical aids. Both ministries plan and execute state expenditures on health care.

The Ministry of Defence, the Ministry of Interior, the Ministry of Justice, and the Ministry of Transport still run their own health care facilities.

Local health state administration

In 1991, the functions of subdistrict and district state physicians were introduced to strengthen the control and planning functions of the Ministry of Health. Subdistrict physicians were responsible for the professional skills of health workers and the organization of health care in their territories. District state physicians, in addition, submitted proposals for permits for private outpatient facilities in their districts to the Ministry of Health.

In 1996, due to radical changes in the administrative and territorial division of the Slovak Republic, the subdistrict and district physicians were replaced by regional state physicians and district state physicians. The tasks of the former were enlarged by providing them with the power to issue the licenses for

outpatient non-state health care providers. In addition, the regional offices became the owners of the state independent policlinics and health centres. The regional and district state physicians now control the operation of the non-state health care providers. Recently, they were also asked to analyse the network of the health care providers in their regions.

Health care providers

There is a mixture of state and non-state providers. Almost all primary health care providers have become private, usually operating alone.

Most inpatient health care facilities are still under state ownership. They are headed by directors appointed by the Ministry of Health. The original idea of the hospital governing board comprising the representatives of the health insurance companies, state administration, municipalities, patients, the private sector and others is still not in practice for several reasons, mentioned below. The director, usually a medical doctor, has an advisory board consisting of the heads of the departments. He/she has two deputy directors – one for health care provision and one for administration and finance.

Health insurance companies

The introduction of a new system of health care financing based on health insurance led to the establishment of a number of completely new organizations – health insurance companies. They are responsible for collecting health insurance contributions and for reimbursing health care services according to the Act on Therapeutical Order. They all administer the compulsory health insurance scheme and are not allowed to carry out other activities. Their number reached twelve in 1996 and then declined to five health insurance companies operating in 1999. The operations of two of them are guaranteed by the state, e.g. the General Health Insurance Company, the largest one, and the Common Health Insurance Company. The latter was created in 1998 by integrating the Military Health Insurance Company, the Railway Health Insurance Company and the Health Insurance Company of the Ministry of Interior. They have to submit their budget to the parliament for approval. Voluntary health insurance has not yet been introduced.

Professional organizations

In 1992, based on the Act on the Slovak Medical Chamber, the first statutory professional body was established followed by the Slovak Chamber of Dentists, the Slovak Pharmaceutical Chamber, the Slovak Chamber of Paramedical

Personnel (nurses, laboratory technicians and other paramedical staff) and the Slovak Chamber of University Graduated Health Workers. Membership in the chambers is obligatory for all non-state health professionals. The chambers ensure their members' professional standards. They are involved in carrying out inspection and control of both state and private health care facilities in developing compulsory legal regulations, a performance-related pay scheme and price proposals for drugs, medical aids and medical prostheses. They are also involved in the appointment (by selection procedure) of leading positions in health care facilities. In addition, the Slovak Medical Association still operates in the Slovak Republic. Membership is voluntary, and its operation is subsidized by the Ministry of Health. Its main activities are aimed at the organization of the professional conferences, meetings, workshops.

Voluntary organizations

Participation by civil associations, such as the Slovak Red Cross and other nongovernmental organizations, in health care provision is regulated by separate laws. The Slovak Red Cross is mainly involved in training people in first aid, but is also responsible for recruiting blood donors, health education of the population and humanitarian activities. It assists in the organization of the military health service and provides other health, rescue, social and humanitarian services. The Red Cross also cooperates in provision of social assistance for the homeless and refugees.

Planning, regulation and management

The Ministry of Health is the main body committed to plan, regulate and manage health care provision. However, since the rejection of the socialist centralized planning, national health plans as such have not been produced. The direction of the development of the health sector is laid out in the political documents called the Programme Proclamation of the Government of the Slovak Republic (*5,6*). The last was approved in December 1998 (*6*). This document defines the goals and priorities of the government, including health care, for four years. The Proclamation was further elaborated on by the appropriate ministries with definitions of activities and time schedule. Among others, the Ministry of Health committed itself to finalizing a well-prepared comprehensive reform of health care in the near future. The document "Transformation Steps in the Health Sector for 1999–2002" was approved by the government in October 1999 to ensure implementation of this commitment (*17*).

The state budget provides a basis for annual financial planning regarding health care expenditures from taxes. These expenditures include resources financing the operation of the Ministry of Health and state budgetary health institutes, capital investments, some health programmes, such as the national immunization programme and the contributions paid to the health insurance system by the state. The Act on State Budget also regulates the value of the contribution per person to be paid by the state. The General Health Insurance Company and the Common Health Insurance Company should also submit their annual budgets to the parliament for the approval.

The present health care system is regulated by five basic acts:

- Act No. 272/1994 on Health Protection of People;
- Act No. 273/1994 on Health Insurance, Health Insurance Financing and Establishment of the Sector, Branch, Enterprise and Civil Health Insurance Companies;
- Act No. 277/1994 on Health Care;
- Act No. 98/1995 on the Therapeutic Order (Slovak version is Zakon o liecebnom poriadku; some authors translate it as the Act on Medical Rules or Basic Benefit Order Act)
- Act No. 140/1998 on Drugs and Medical Devices, which was adopted in 1998 and completed the set of Acts regulating health care.

The *Act on Health Care* regulates, among other areas, the issue of licenses for the non-state health care providers. It was amended several times. According to the last amendment, the regional state physicians issue the licenses for outpatient care and for agencies of home nursing care, and the Ministry of Health for all others. The Act further regulates the rights and obligation of health care providers, the rights and obligations of patients and other general conditions for the provision of health care. Based on this, the Ministry of Health had to issue regulations regarding the network of health care facilities; details about the provision of primary, secondary and tertiary care; standards of minimal personnel and technical equipment of different types of health care facilities; the form and process for postgraduate training and education of health personnel, etc. As the first of these regulations, the directives of the Ministry of Health on the network of health care facilities were issued in November 1997. However, due to legal ambiguity, it was abolished. Since January 1999, the widening of the network has been stopped by the Ministry of Health until a thorough analysis of the existing network is carried out and a new regulation on network of health care facilities is prepared. One of the weaknesses of the Act on Health Care was neglecting the reporting obligations of the non-state health care providers. This influenced the system of health statistics for several years. Some data on

health care resources, their utilization and costs for 1992–1996 are not available. Consequently, the planning and regulatory functions of the Ministry of Health have been substantially weakened. Therefore, the last amendment of this Act specifies the reporting obligation of all health care providers.

The *Act on Health Insurance* introduced a compulsory health insurance scheme based on the principles of solidarity, non-profit and plurality. In the beginning, it established relatively mild criteria to be fulfilled for establishing a health insurance company. As a result, the number of health insurance companies increased to thirteen in a few years. This situation proved to be unsustainable. In 1995, the amendment of the act introduced stricter criteria for the establishment, and particularly the operation of the health companies, as shown below. It resulted both in mergers of some health insurance companies and in closures of others. These companies left a debt in the health insurance system, a problem which had to be solved by the government. Today, only five health insurance companies administer the compulsory health insurance scheme. Also, the act has not adequately regulated the reporting obligations of the health insurance companies. This has resulted in a loss of the link between the state health information system and the information systems of the health insurance companies. Two other regulations – the decree on redistribution mechanism and on specific accounting – have addressed a possible adverse selection of insured persons. In 1999, a new regulation of risk-structure compensation was introduced (see below).

The *Health Insurance Act* is currently under scrutiny. Compared to similar legislation in other European countries it does not recognize family members, separates health from sickness insurance and has insufficient provisions for use of benefits abroad to meet the requirements of the European Social Charter.

The relationship between the health care providers and the health insurance companies can be described as a contract model. Some argue that the health insurance companies have a dominant position, often dictating the conditions of the contracts and then breaching them. Their restrictions imposed on the volume of payments and delays have caused secondary debts among the health care providers.

The *Act on Therapeutical Order* defines the conditions for health care provision covered by the health insurance scheme as well as the amount to be co-paid or fully paid by the patient. It defines the system of reimbursement of the health care providers for their services. This act comprises four large appendices: the List of Health Care Procedures, the List of Drugs, the List of Medical Aids and the Indication List for Spa Care. The act has not provided an adequate basis for the regulation of health care provision. In particular, the List of Drugs has caused many problems resulting in several amendments of

the act. As the basic regulatory tool, it has not been sufficient to contain the costs of drugs. The costs on health care have increased substantially. The growing demand of health care services has not been covered by adequate financial resources. The Ministry of Health has had to intervene, changing the reimbursement systems several times.

Due to growing costs of drugs, the Ministry of Health has initiated hospital drug formularies to regulate prescriptions in hospitals and other inpatient health care facilities. The Ambulatory Drug Formulary was issued to regulate drug prescription practices in outpatient health care. According to the amended Act on Health Care in 1998, health care providers have to prescribe drugs according to this formulary. In addition, the Ministry of Health issued Standard Therapeutic Procedures and Standard Diagnostic Procedures as recommended procedures. If physicians decide to not follow these standards, they should document the chosen procedure and the reasons for not abiding by the standards in the patient documentation.

Due to the fast pace of health care reforms, there was a need for a quick change in regulatory, planning and management functions of the Ministry of Health and other authorities responsible for health care. However, this proved to be a difficult task and several negative developments were observed as the result of the growth of heath care providers and other institutions. High transaction costs and an unsustainable financing situation have resulted in today's severe financial crisis. Frequent amendments of the basic acts regulating health care provision and many interventions by the Ministry of Health have not always contributed to the stabilization of the situation. Frequently, decisions have been bureaucratic and centralized, such as reduction of the number of beds in 1997 (*15*). The main weaknesses come from the lack of monitoring, analysis and evaluation of the individual measures already taken or to be taken in the future. Improvements in these functions will be needed in the future.

In addition, human resource planning has not been introduced since 1989. It is closely connected with other two policy documents – the Network of Health Care Facilities and the Standards of Health Personnel. They are still under preparation and should be the basis for future planning and regulation. Before these documents become policy, a thorough analysis of human resources has to be made.

Decentralization of the health care system

The main goals of the health care reforms included reducing the state monopoly on health care provision and decentralizing health care provision.

While the former goal has been achieved through the privatization of health care providers, particularly primary health care doctors, the process of decentralization has proved to be difficult.

As revealed during the reform process, the abolishment of the institutes of national health led to centralized management of the health care facilities. It was considered as a transition stage to enable privatization. However, centralized management of the inpatient health care facilities has been preserved until now. There have been several reasons for this: first, the municipalities initially rejected responsibility for the hospitals due to a fear they would be not able to manage, finance and sustain them. Second, the government feared allowing the inpatient health care facilities to become private. It seems that the process of decentralization will be fostered in the near future, at least with regard to small hospitals. Progress has been achieved in the case of the health polyclinics and health centres providing outpatient care. Accordingly, responsibility for these centres was *devolved* to the regional offices of the state administration or to the municipalities.

As mentioned above, some administrative tasks of the Ministry of Health have been passed to district and regional state physicians. This has been decentralization by *deconcentration*. The latter are allowed to issue the private practice permits for outpatient care. They are responsible for the organization of the outpatient health care provision in their territories and are also involved in the analysis and development of the network of the health care facilities.

Financing of health care provision has been fully *delegated* to the health insurance companies since 1994. There are direct contractual relationships between single health care providers and the health insurance company.

Privatization

First, all public pharmacies became private by the end of 1995. They were followed by the primary health care providers, who were privatized by the end of 1996. Later, the privatization of specialist outpatient care was permitted. By the end of 1997, the Ministry of Health and the regional and district state physicians issued 6169 licenses for private primary health care providers, 2122 permits to provide secondary outpatient health care in the non-state health care facilities, 46 licenses for private agencies for home nursing care, 9 licenses for non-state polyclinics, 4 private hospitals with polyclinics, 3 non-state specialized curative establishments, 3 non-state *sanatoria* and 19 non-state facilities for spa care (*15*).

During privatization, a substantial growth of health care providers was reported in primary health care, particularly with regard to dentists and general

practitioners. Currently, the network cannot be widened until the analysis of the health care providers is finished. However, the provision of health care services within the existing network can be privatized. The goal of the government is only to allow privatization that will ensure an improvement in health care provision. In deciding who will become the owner, the interests of health personnel working in the health care facility to be privatized and those of the municipality will be taken into account.

Health care finance and expenditure

Main system of finance and coverage

The system of finance based on general taxation and implemented through the annual budgets was replaced by the compulsory health insurance system. This transformation took only two years. Reform of health financing started with the establishment of the Institute for the Introduction of Health Insurance in 1992. The result of its work was the establishment of a national insurance agency to finance health care, sickness and pensions (through Act No. 7/1993 on Establishment of the National Insurance Agency and on Financing of Health Insurance, Sickness Insurance and Pension Insurance and Act No. 9/1993 on Health Insurance and the Management of the Health Insurance Fund). This created the first legal basis for the operation of the Health Insurance Plan, including rules for provider reimbursement. Until January 1994, the National Insurance Agency with its three separate Health Insurance, Sickness Insurance and Pension Insurance Funds continued to be funded through the state budget.

After January 1994, the financing of the National Insurance Company was separated from the state budget, making the company independent. Financial flows between the health, sickness and pension insurance funds proved incompatible with adequate allocations to health funding, leading to a proposal to separate the Health Insurance Plan from the sickness and pension schemes. Two independent institutions were established – the National Social Insurance House and the General Health Insurance Company. On 1 January 1995, the Act No. 273/1994 paved the way for the creation of a number of health insurance companies.

Health insurance companies

While in 1995, ten health insurance companies administered the compulsory health insurance, in 1996 there were twelve. The amendment to the Act on Health Insurance, adopted in the autumn of 1995, strengthened the legal requirements for running the health insurance company. As a result, today only five health insurance companies operate. The biggest is the General Health Insurance Company (GHIC), which operates through branches throughout the country. Its coverage decreased from about 96.5% of the population in 1995 to almost 50% in 1997 (*3*) but increased again to two thirds of the population in 1999, mainly due to the takeover of the insurance company Perspektiva**.** Three sector health insurance companies – the Military Health Insurance Company, the Railway Health Insurance Company and the Health Insurance Company of the Ministry of Interior – merged to form the Common Health Insurance Company, operating since July 1998. This is the second largest insurer with around 13% of the population and it insures mainly the employees of these sectors; however, anyone may be insured with them. The state guarantees the solvency of the General Health Insurance Company and the Common Health Insurance Company. These could be described as **"**statutory**"** institutions. The other three health insurance companies (Apollo, VZP-Dovera and Sideria, each insuring around 7%) are **"**private**"**, i.e. their solvency is not guaranteed by the state.

The GHIC carries out its activities through self-governing and executive bodies. The former comprise the Board of Directors and the Supervision Council. The Board of Directors consists of five representatives of the insured, five representatives of employers and five representatives of the state, all of whom have to be approved by the parliament**.** The Board of Directors decides on the principal issues affecting the company's operation. Executive bodies comprise the directorate and branches. To control quality and quantity of health care provision, the health insurance companies also employ inspection doctors (peer-reviewers).

GHIC revenues are drawn from insurance contributions, the state budget (contributions on behalf of the economically inactive persons and a subsidy to cover rises in health service costs), various sanction fees (fines), income from property, gifts and other incomes. GHIC submits an annual end-of-year account to the parliament and a draft annual budget for the forthcoming year. The insurance budget consists of four funds: the Basic, Reserve, Purpose and Administrative funds.

Resources of the *Basic Fund* are to be used only to reimburse health care services as defined by the act. It is forbidden to allocate these resources to other programmes, such as health services above standard. The *Reserve Fund* –

0.5% of all contributions – is for unexpected expenditures. These must not exceed one fourth of the average annual amount of the Basic Fund in any calendar year. The Purpose Fund – created from 2.0% of all contributions, from gifts and earmarked state allocations – is spent on reimbursing increased costs in connection with the provision of health care to specific insured groups. The *Administrative Fund* should not account for more than 4% of revenues and covers administrative expenditures of the insurance company and its bodies.

The other health insurance companies have similar systems of self-governing bodies and funds.

Each new health insurance company requires approval by the Ministry of Health. To obtain this, it must enrol at least 300 000 insured persons within the first year of its existence, have a minimum of SKK 30 million at its disposal in a Slovak bank and a precautionary reserve of at least SKK 10 million in a Slovak monetary institution. It then submits an analysis of estimated revenues and expenditures, a premium plan, and proposals to the Ministry of Health. The introduction of these criteria led, as expected, to a reduction of the number of insurers. Some health insurance companies merged, and others were closed. Their insured persons were passed to the General Health Insurance Company. However, their debts to the health care providers have not yet been paid, which causes many problems.

Only health care services specified in legislation may be reimbursed from compulsory insurance. This rules out competition among insurers regarding the range of services.

Contributions

Contributions are collected and administered by the health insurance companies. Health insurance contributions are strongly individualized; coverage by the health insurance plan does not include family members. Contribution rates are defined by law and relate to income. The contributors are responsible for calculating of their assessment basis (that is, their level of income).

Self-employed persons have to pay 13.7% of their assessment basis, employees pay 3.7% of the assessment basis and their employers cover 10% of the sum of all employees' assessment bases. There is, however, an upper limit on individuals' contributions. No one's contribution may exceed a value of eight times the minimum wage. This means that the system is in effect regressive, as the wealthiest pay a smaller proportion of their income than the majority of the population. Employers of the disabled contribute only 2.6% of the assessment basis, and the rest is made up by the state. The Employment Fund contributes for unemployed persons. The state also has to pay a contribution of

13.7% of the minimum wage on behalf of children, pensioners, persons caring for children or disabled persons, soldiers in military service, prisoners, refugees, and other inactive persons – 3.2 million people in total. However, when approving the bills on the state budget, the National Council has on several occasions amended the level of contributions paid by the state. In 1994, while the contribution rate was the same (13.7%), it was only paid on 10% of the minimum wage. In 1995, the 13.7% contribution payment rose to 54% of the minimum wage; in 1996, to 75% and this level has been preserved until now (13.7% of 76.5% in 1999). In practice, it means that instead of SKK 411 per capita per month, the state contributed SKK 283 per capita per month in 1998 and 1999.

Overall, the debt in the health system reached SKK 13 billion in 1999 – in comparison with only around SKK 3 billion in 1996 (*16*). Debts exist along a chain. First, the health insurance companies have not yet received all contributions they are entitled to. Second, the health insurance companies have not yet completely paid the providers. Third, the health care providers owe money to suppliers of goods and services.

Redistribution among insurers (risk-structure compensation)

The implementation of the Health Insurance Plan in Slovakia has raised some problems from the very beginning. Evidence of adverse selection has been noted in the financial administration of the health insurance companies. Because insurance companies registered different numbers of economically active and inactive persons, requiring different amounts of health care, the incomes and expenditure of each health insurance company were very different. In 1995, 60% of contributions collected by all the health insurance companies were "pooled" into a special account of the General Health Insurance Company. From there they were redistributed according to the number of economically active and inactive insurees. However, this proved to be insufficient and the percentage is changed every year but has remained in the 60–80% range. This mechanism has caused a lot of problems. Since July 1999, a new mechanism for in risk-structure compensation has been used. Now, all 100% of contributions collected by all health insurance companies are redistributed according to the age and sex of the insurees. The central registry of insured persons has been introduced to make the process transparent and increase accountability. The General Health Insurance Company was asked to administer this register; however, due to many complaints, the Ministry of Health took over responsibility for the Central Registry in 1999. The redistribution mechanism still causes tension among the insurers.

Coverage

All permanent residents in Slovakia are covered. Only those who are abroad for more than twelve months and are insured in their country of temporary residence are excluded. In addition, anyone employed or self-employed but without permanent residence in Slovakia is compulsorily insured. A major challenge of health care reform has been to maintain full population coverage.

Health care benefits and rationing

Health care benefits are very comprehensive. Almost all health care services are covered based on the Act No. 98/1995 on the Therapeutic Order. As mentioned above, this act comprises the List of Health Services, the List of Drugs, the List Medical Aids (separated from the drugs by the amendment in 1997) and the Indication List for Spa Care. Such structure and content of the act has caused a lot of problems as any change in a list could only be made by an amendment of the act. There is a great deal of interest in excluding the lists from the act and in introducing a regulation of lower legal force.

Rehabilitation following illness, spa treatment, spectacles and most basic dental procedures are also covered by health insurance. Only a few treatments are excluded. These include acupuncture, sterilization, abortion, cosmetic surgery, experimental treatment, and psychoanalysis (but all of them only in cases when there is no health need). Amendments are expected in the near future, especially regarding coverage of drugs, medical aids and prostheses. The move from general tax to social insurance financing has not significantly reduced the benefits package provided free of charge, with the exception of abortion and sterilization. Earlier, these required only small co-payments; the rest were paid by the state. However, today there is an urgent need to restrict the range of services covered by the compulsory health insurance.

Drugs are divided into three categories. In 1995, there were 2000 essential drugs in the first category and these were fully covered by health insurance. The second category (mostly the same drugs produced by different manufacturers) are partially reimbursed. Those in the third category are mainly vitamins and minerals and are paid for out-of-pocket. A radical reduction of the number of drugs in the first category was expected from the amendment to the Act on the Therapeutic Order in 1996, although the way of categorization has been substantially changed in favour of ATC classification and taking into account the daily recommended dose according to the WHO recommendations. However, the expenditures of the health insurance companies on drugs have not declined from almost 30% of all health care costs.

Complementary sources of finance

Although the main source of finance of the health care system comes from health insurance, the state contributes to this system on behalf of economically inactive persons and supports capital investments and the whole system of so-called *budgetary organizations* (state-owned, run and financed) through the state budget. These include the network of 37 public health institutes, the National Health Promotion Centre, the Institute for Health Information and Statistics, the State Institute for Drug Control, the Slovak Medical Library, educational institutes such as the secondary health schools and the Slovak Postgraduate Academy of Medicine. According to the new method of calculation, the overall amount of the state contribution to the health sector was SKK 11.4 billion in 1998 (*21*). From that, the sum of SKK 10.6 billion was allocated to the health insurance system as the contribution on behalf of the insured persons to be paid by the state. This represented about 25% of the total income of the health insurance companies.

Table 1. Structure of the main sources of finance, in million SKK[a]

Source of finance	1990	1992	1996	1997	1998
Total health expenditure	13 500	19 100	43 771	49 880	47 560
Public	13 500	19 100	40 488	44 693	43 155
• Taxes	13 500	19 100	14 594	15 087	11 493
• Statutory Insurance			25 894	29 606	31 714
Private					
• Out-of-pocket			2 451	3 488	3 752
• Private insurance			0	0	0
Other					
• External sources			832	699	653

Source: Statistical Office of the Slovak Republic (*21*).
Note: [a] until 1992 in CSK (Czechoslovak koruna).

Table 2. Main sources of finance, (%)

Source of finance	1990	1992	1996	1997	1998
Public	100	100	92.5	91.5	90.7
• Taxes	100	100	33.3	30.8	24.1
• Statutory Insurance	–	–	59.2	60.7	66.7
Private					
• Out-of-pocket	–	–	5.6	7.1	7.9
• Private insurance	–	–	0	0	0
Other					
• External sources	–	–	1.9	1.4	1.4

Source: Statistical Office of the Slovak Republic (*21*).

Out-of-pocket payments

According to health legislation, patients have to pay certain co-payments. Insured persons do have to pay a part of the cost of drugs if they prefer a drug from the second category to one from the first. However, they must be informed of this by their physician. People also pay for part of the cost of some medical aids and prostheses, particularly some dental products. There are also out-of-pocket payments for some spectacle frames. In these cases, payments are made in cash directly to the pharmacies and opticians. These have been monitored since 1996 by the Statistical Office of the Slovak Republic: in 1996, they accounted for SKK 2.45 billion; in 1997, for SKK 3.49 billion; and in 1998, for SKK 3.75 billion. Recently, a new categorization has been adopted, which requires co-payments for some groups of drugs. Through the introduction of a reference price system (i.e. setting maximum prices for the reimbursement of the drugs by the health insurance) co-sharing is substantially growing.

It is possible to pay directly for private health care services. In practice this is mostly seen in private dental clinics and other private outpatient services. Insurers pay for all services covered by the Health Insurance Plan irrespective of whether the service is provided by a state facility or a private physician working within the Network.

Voluntary health insurance

Voluntary health insurance is offered as contractual health insurance. In total it represents a very small proportion of health care spending in Slovakia. Contractual health insurance is used by persons excluded from the compulsory Health Insurance Plan (persons without permanent residence and not employed in Slovakia, as well as those with permanent residency in Slovakia but health insurance abroad).

Supplementary health insurance covers services not covered by the compulsory Health Insurance Plan, and the most important of these is reimbursement of health care provided abroad. This is very restricted (in both the extent of services and the total sum reimbursed) under the compulsory Health Insurance Plan. Both individuals and employers often use this when travelling abroad. This form of health insurance is offered by the health insurance companies in cooperation with commercial insurance companies.

Among the priorities of the current government is the introduction of a complete scheme of voluntary health insurance and the restriction of the comprehensiveness of the compulsory health insurance to the amount that can be covered by present health care expenditures.

External sources of funding

The Government of Switzerland has offered assistance to Slovakia for the purchase and utilization of medical equipment of intensive care units, and it is expected for the purchase of necessary X-ray equipment. USAID has substantially supported the establishment of a cardiac surgery centre for children in Bratislava. They have offered substantial help in the form of technical assistance and human resource training and development, aimed at strengthening of professional and management capacities within the health sector. The European Union has offered assistance under the PHARE programme. Substantial technical assistance has been provided from the World Health Organization Regional Office for Europe under the EUROHEALTH programme, mostly in environmental health, prevention of noncommunicable diseases through the CINDI programme, AIDS prevention, and health promotion programmes under Healthy Cities and Health Promotion Schools. These sources were not included under the health care expenditures.

In addition, there was substantial assistance provided by foreign agencies as well as domestic private firms to individual health care providers. These accounted for SKK 203 million in 1997 and SKK 218 million in 1998. Before, these resources were not monitored and precise data were not available. The State Health Fund – an institution created by the government by collecting resources from privatization, penalties, gifts etc. to support priority programmes in the health sector – allocated to health care SKK 504 million in 1996, SKK 180 million in 1997, SKK 56 million in 1998. The municipalities contributed the lump sum of SKK 200 million in 1996, SKK 199 million in 1997 and SKK 176 million in 1998 to health care from their budgets. Other non-profit organizations also supported health care with SKK 128 million in 1996, SKK 117 million in 1997 and SKK 203 million in 1998.

In 1999, the World Bank granted US $510 000 to the Ministry of Health to initiate preparatory work for health reform in 2000.

Health care expenditure

The proportion of GDP on health varied between the lowest level of 5.25 % in 1993 and the highest level of 7.6 % in 1996. The former value was still higher than the 5% of GDP officially spent on health care during socialist rule (*7*). It is more than the central and eastern European countries average of 5.1% of GDP and less than the western European Union countries average of 8.4% (Fig. 3). However, it has shown to be insufficient to cover current demands on health care. As argued by the Ministry of Health, the real needs of health care

exceed available resources by 20% (*16*). The current government in its policy document "Transformation Steps in the Health Sector for 1999–2002" has decided to increase the allocation to health care.

One problem with the expenditure data is that they are calculated according to different methodologies. It seems that total health care expenditures were under-reported in national sources before 1996. In the literature, most likely only resources allocated and spent through the health insurance system created a basis for calculating the share of the health care expenditures from GDP (*2,3,16*). These sources report that the health expenditures accounted for 6.58% of GDP in 1996, 6.21% in 1997 and 6.0% in 1998. This is probably also the case for the data before 1996, taken from this literature for Table 3. WHO Regional Office for Europe health for all database reports values which are about 1% higher for this period (see Fig. 4). Since 1998, yet another methodology is being used to calculate health care expenditure by the Ministry of Finance which has resulted in an apparent drop in expenditure between 1997 and 1998.

Table 3. Trends in health care expenditure, 1980–1998

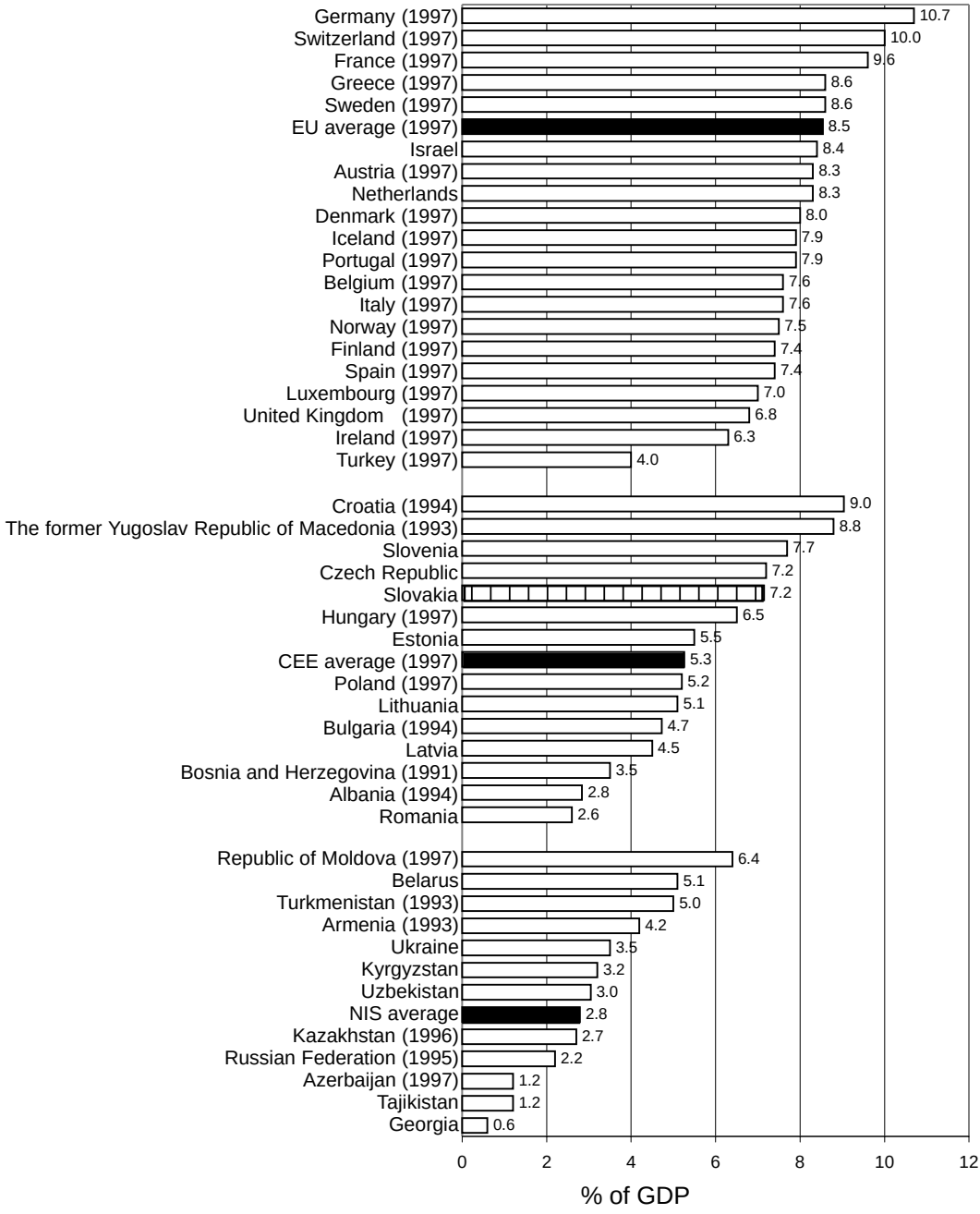
Total expenditure	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Value in current prices SKK[a], billion	13.5	17.5	19.1	17.8	21.6	32.8	43.41	48.52	47.56	51.39
Share of GDP (%)	5.41	5.85	6.43	5.25	5.69	6.35	7.54	7.42	6.63	6.25
Public share of total expenditure (%)	100	100	100	100	100	–	92.5	91.5	90.7	90.1

Source: Ministry of Health for 1990–1995; Statistical Office of the Slovak Republic and Ministry of Finance for 1996–1998.
Note: [a] until 1992 in CSK (Czechoslovak koruna).

Despite the expectation to create multi-source financing of health care, most of the resources available to health care provision come from public sources – both from compulsory health insurance and the state budget. Systematic measures such as additional health insurance or other forms of voluntary insurance to attract other sources have not yet been introduced.

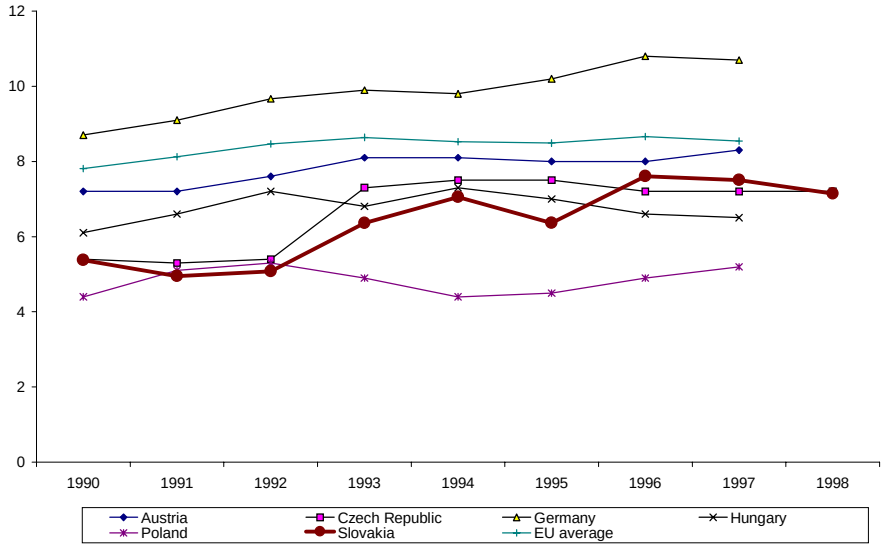
The trend of health care expenditure did not resemble that of any western European countries. It was highly unpredictable, reaching the first peak of 6.43% of GDP in 1992 after a rapid growth in 1990. In 1993, it fell to 5.25% of GDP. Subsequently, the share of GDP on health continually increased to 7.54% in 1996. However, the big difference in percentage of GDP allocated to health care between 1995 (6.35%) and 1996 (7.54%) is caused by the different ways of calculating this value, as mentioned above. After yet another change in

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



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

Fig. 4. Trends in health care expenditure as a share of GDP (%) in Slovakia and selected countries, 1990–1998



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

Table 4. Health care expenditure by category, (%) of total expenditure on health care, 1970–1999

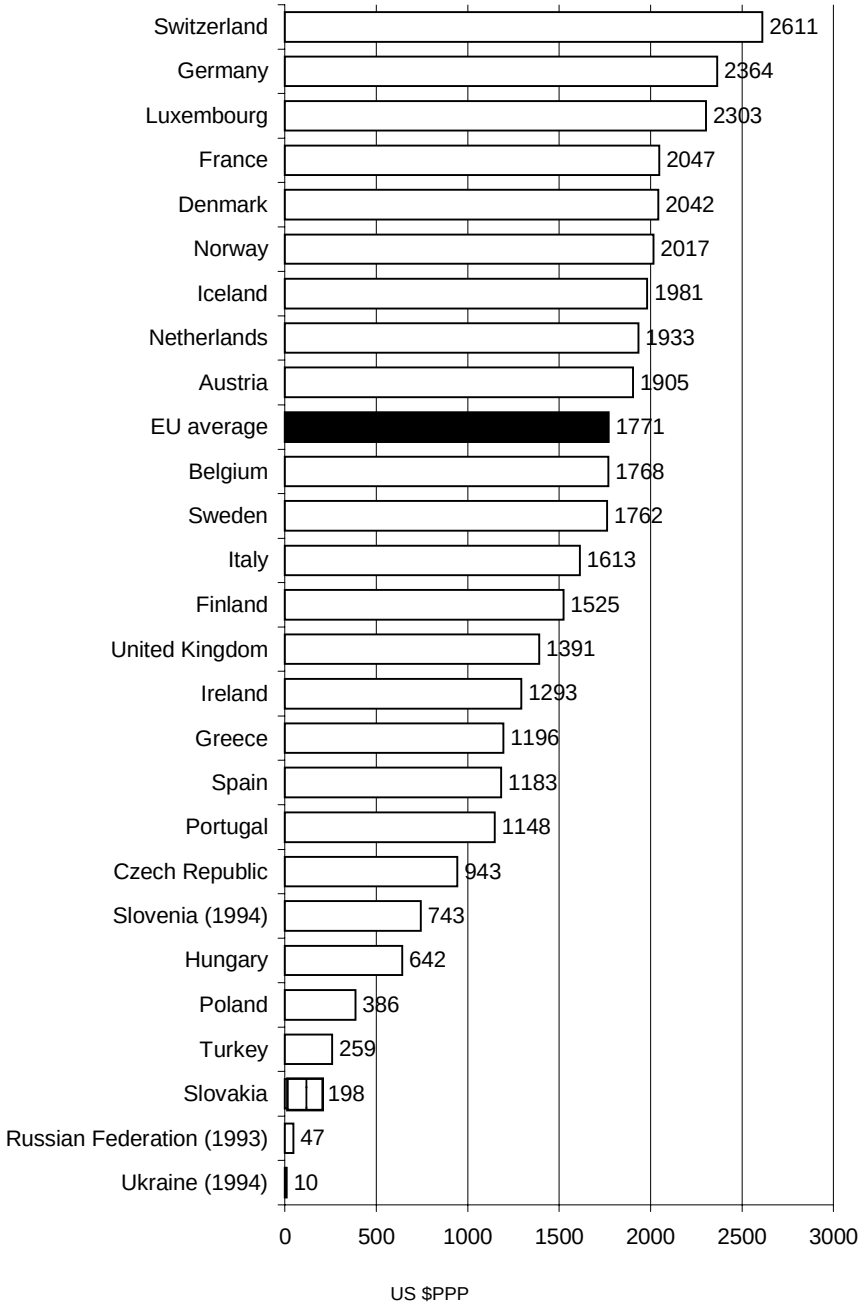
Expenditure	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999[a]
Public (%)	100	100	100	100	100	100	100	100	100	–	92.5	91.5	90.7	90.1
Inpatient care (%)	31.4	33.0	32.2	34.1	32.1	–	–	–	–	43.0*	44.0*	44.8*	48.2*	47.0*
Pharmaceuticals (%)	13.6	14.3	15.7	17.0	16.8	18.1	23.6	28.0	28.7	28.0*	30.1*	29.7*	28.7*	28.3*
Investment (%)	14.0	12.5	12.0	11.1	12.5	11.1	10.8	9.0	9.3	9.3*	6.0*	5.2*	5.7*	5.7*

Notes: * Inpatient and pharmaceuticals are calculated as a percentage of health insurance expenditure only. Inpatient care also comprises outpatient (primary and ambulatory) care services delivered to insured in hospitals. Pharmaceuticals comprise drugs medical material and medical appliances. Investments are calculated as a percentage from the total public expenditure. [a] Data for 1999 are preliminary.

calculating, the trend of the last two years has shown a decline of the proportion of GDP on health to about 6.25% in 1999. The trend of health care expenditure is therefore similar to neighbouring Czech Republic and Hungary.

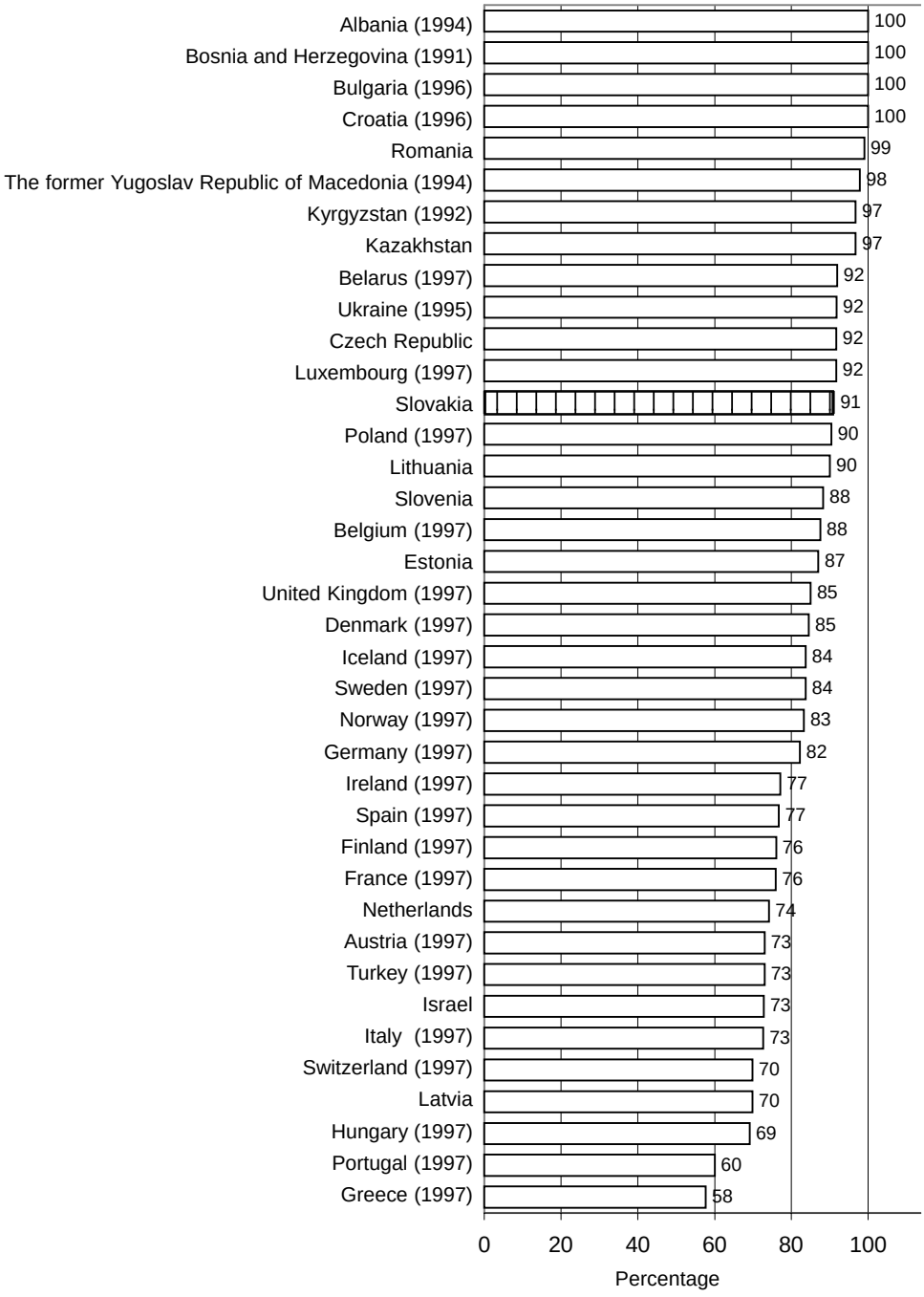
In 1997, the Slovak Republic spent US $PPP 198 per capita. It is among the lowest recorded values in Europe and is only about one ninth of the EU average (Fig. 5). The portion of public health expenditure as a percentage of total health expenditure equals that of the Czech Republic; it is still higher than in most EU countries (Fig. 6).

Fig. 5. 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.

Fig. 6. Public (government) health expenditure 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.

The development of the structure of the health care expenditures has been unfavourable during the reform. Particularly the costs on drugs grew very rapidly. In 1991, expenditures on drugs accounted for CSK 3.3 billion, in 1992 CSK 4.5 billion, in 1993 SKK 6.3 billion, in 1994 SKK 8.3 billion, in 1995 SKK 11.8 billion, in 1996 SKK 14.9 billion (*3*), in 1998 SKK 13.4 billion, with nearly 30% of health expenditures from the health insurance system. These represent only the costs reimbursed by the health insurance companies for drugs. They do not include co-payments or drugs fully paid for by patients.

Health care delivery system

Primary health care and public health services

As a result of the health care reforms of the 1990s, primary health care services have become separated from the public health services. The former are regulated by the Act on Health Care and reimbursed from the compulsory health insurance scheme based on the Act on Therapeutical Order. The latter are provided by *budgetary organizations* (state-owned, run and financed) and are operating based on the Act on Health Protection. In the past, a similar situation existed until 1966 (see *Introduction*). This substantially influenced the preventive and health education programmes carried out in the past.

Primary health care services

Primary health care includes all first contact ambulatory care, both preventive and curative, including home visits. The four types of the first contact doctors – general practitioners for adults, paediatricians (for children and adolescents), gynaecologist-obstetricians and dentists – have been preserved from the socialist health system. Primary health care physicians carry out basic examinations, diagnosis, interventions and treatment. Recently, they have been limited in their work: they cannot perform some diagnostic procedures and prescribe some drugs. In these cases, they have to refer patients to specialists. The concepts (strategy documents) were adopted by the Ministry of Health defining the role and responsibilities of each type of primary health care doctor. Paediatricians are involved in immunization and screening activities. They care for children and adolescents up to the age of 18 years. Gynaecologists carry out family planning functions. In addition, they provide preventive services and screening for women. All four types of physicians act as gatekeepers, making referrals to specialist outpatient and inpatient care. Primary health care provision is

supported by nurses and paramedical personnel, including dental technicians. Although previously integrated into primary health care, occupational health care services (protection against occupational diseases, accident prevention and first aid) were removed from primary health care.

Despite the gatekeeping role of primary care doctors, patients may self-refer to an ophthalmologist in case of eye injury or for prescription of spectacles and, in some cases, may directly see psychiatrists, geneticists and specialists for sexually transmitted diseases. In addition, those with chronic illnesses who are registered in a specialist's clinic have direct access to appropriate specialist physicians. However, there are many other cases of bypassing the primary health care doctors.

In 1990, there were 6257 primary health care doctors compared with 6341 in 1998. Although their total number has not substantially changed (an increase by 1.34%), the number of general practitioners for adults decreased by 203 and those for children by 46, while the number of dentists increased by 320.

People have a right to change their primary health care physician every six months. The choice of primary health care physician is mainly related to place of residence or employment. The geographical distribution of outpatient health care facilities – including primary care – is not absolutely equal. In 1994, there were 25 outpatient physicians posts per 10 000 population in cities compared with 8.6 per 10 000 population in small towns. However, there is little difference in accessibility or quality of care between rural and urban areas.

Physicians in primary health care usually work in single-handed practices and are almost always private. By the end of 1998, 93.9% of primary health care providers were private. Privatization of primary health care has been eased substantially by allowing private doctors to rent the same room and equipment (from the health centre or polyclinic), which they used while state-employed. If they can afford it, they can buy this equipment at a favourable price. Some groups of doctors, especially in smaller health centres, are now able to buy these buildings. In 1990, 52 polyclinics existed in the Slovak Republic. In 1998 there were 77, including 23 private polyclinics. Privatization has generally been effected smoothly, without a negative impact on patients. Regarding decentralization, the municipalities were not very active in privatization of the health care facilities. The situation has substantially changed now, as some health centres, polyclinics and hospitals will be passed over to new ownership. By the end of 1997, 240 health centres out of 460 were passed over to the municipalities, followed by 52 more in 1998. During 2000, 70 additional health centres are expected to be passed over to the municipalities.

Private doctors are paid directly through contracts with health insurance companies. It is the main source of their income as citizens do not like out-of-

pocket payments if it is not necessary. Staffing is set by the licensing process. From their income, they employ at least one nurse, rent rooms and pay other fees. Initially, at the beginning of privatization, their income was two or three times higher than that of state-employed physicians but, in recent years, their situation has worsened substantially. As patients can change their primary care doctor every six months, physicians have been motivated to improve quality of care.

In recent years, primary health care provision was supported by the agencies for home nursing care. They started as an experiment in 1996. In 1998, there were 53 private and 26 state agencies for home nursing care. They still experience a lot of problems due to unsolved issues in legislation and financing.

As part of the process of integrating the Slovak Republic into the European Union, there are plans to harmonize certification of primary care doctors and nurses. It is expected that the training, scope and tasks of general practitioners and nurses will be changed to meet with the appropriate European Union directives.

Public health services

Public health services are carried out by the network of 37 state health institutes. First, they were transformed from the *hygienic stations* under the socialist health system to institutes of hygiene and epidemiology in 1992. Then, since the Act on Health Protection came into force on 1 January 1995, they started operating as state health institutes. Their management, organization and financing is centralized and headed by the chief hygienist. The public health services comprise prevention and control of communicable diseases, environmental hygiene, child and youth hygiene, nutritional hygiene, preventive occupational medicine, protection against ionizing radiation, epidemiology and medical microbiology. Health education and health promotion were added to public health services in 1995. All of these activities and tasks are carried out by the state health institutes and are financed from the state budget. The public health institutes also monitor and analyse the health status of the population.

The Ministry of Health, through the chief hygienist, coordinates all health protection activities. In addition, it agrees on the production, import and use of vaccines, biological diagnostic preparations, and anti-microbial substances for laboratory testing and disinfection.

Some tasks have been devolved to district and regional hygienists who are mainly directors of the state health institutes. They coordinate implementation of health protection and health promotion programmes and carry out state supervision. Through them, regulations in the field of health protection are

enforced. Recently their function to impose penalties for failure to follow regulations has been strengthened, particularly with the adoption of the Act on Protection of Non-smokers.

The National Health Promotion Programme was adopted by the parliament in 1992, at which time the National Health Promotion Centre was established. This Centre coordinates and supports health promotion activities in the state health institutes. These further support health promotion and health education activities through, for example, health promoting schools, healthy workplaces and healthy cities according to WHO guidelines in these areas. Based on the WHO CINDI programme, health counselling centres have been established in the health state institutes to help the population combat the main determinants and risk factors of noncommunicable diseases. In 1995, the National Health Promotion Programme was updated focusing on six priorities. The Coordination Board of Ministers for Health Promotion as a multisectoral body was established to coordinate health promotion activities. The Institute of Health Education was integrated into the National Health Promotion Centre in 1998.

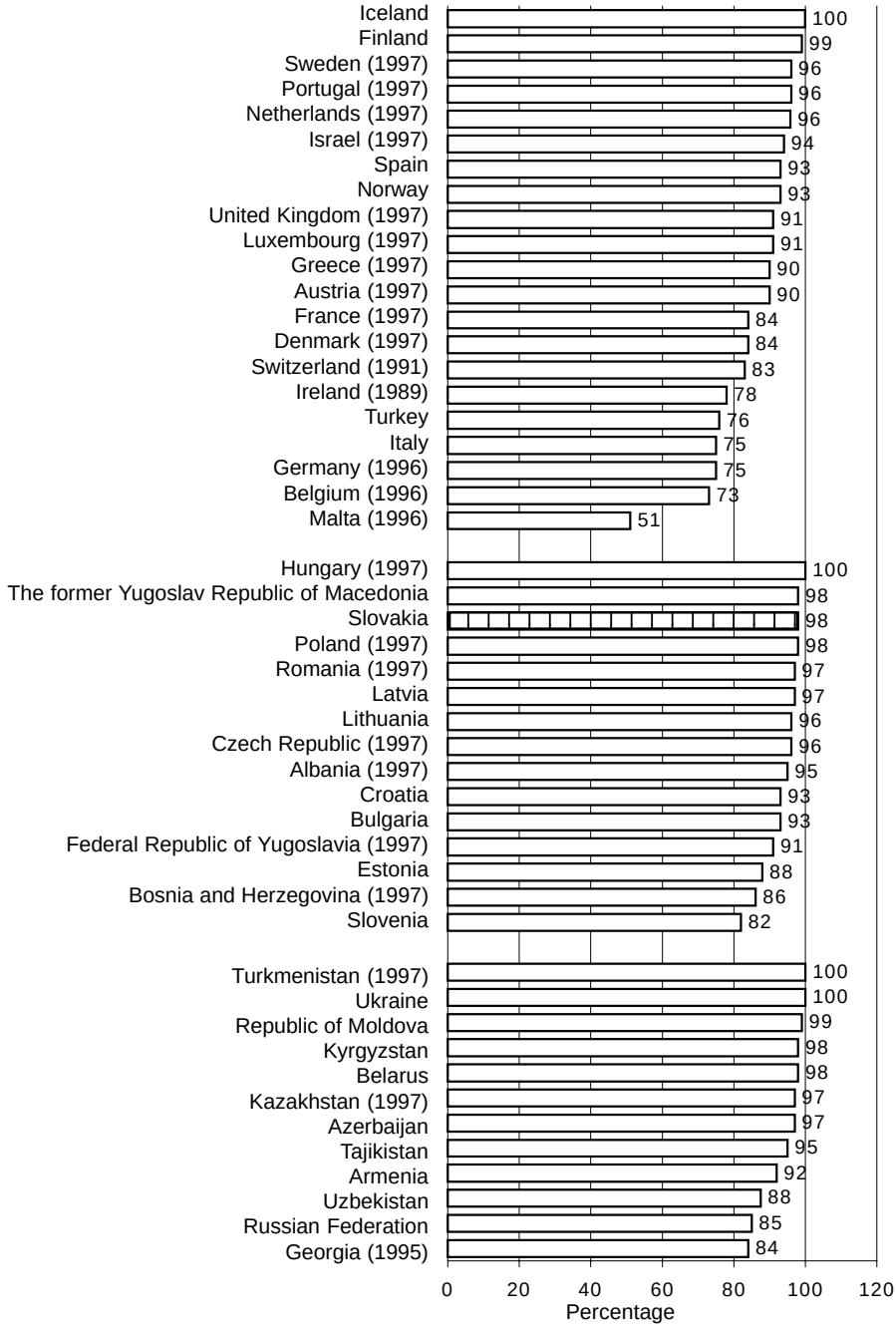
Immunization services are carried out by primary care paediatricians in close cooperation with the state health institutes in accordance with the National Immunization Programme. Vaccines are supplied free-of-charge by the state through the state health institutes. Recently, the state decided to cover vaccinations for children and people at risk against hepatitis B.

As shown, the public health infrastructure has been preserved during the health sector reform and partially transformed into a modern one. However, by the adoption of the Act on Health Protection, some public health functions have become isolated, particularly those dealing with health information and statistics. Within the network of the state health institute, a separate information system of hygiene and epidemiology is being introduced. In the future, emphasis has to be placed on improving cooperation among the health state institutes and the primary health care providers regarding prevention and health education.

Despite tight financial resources allocated to public health, there have been many achievements during recent years. These have been possible in part due to wise utilization of the know-how provided by WHO and other authorities in public health. Implementing the WHO EPI programme, for example, the Slovak Republic reached one of the highest levels of immunization within Europe (Fig. 7). Despite the health reform processes, this level has been maintained in contrast to some countries of the former Soviet Union. The immunization rate reached 98.3% against poliomyelitis, 99.1% against diphtheria, whooping cough, and tetanus, 98.5% against measles, rubella, parotitis in 1998 (*16*).

In 1997, the Decree on Communicable Diseases was issued according to current requirements. Slovakia also has a national programme on HIV/AIDS

Fig. 7. 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.

prevention and the multisectoral body comprises various ministers, non-governmental organizations and other representatives.

The future development of public health will be influenced by the efforts of the Slovak Republic to become a member of the European Union. There is a trend to rationalize public health services, particularly laboratory activities. An amendment of the Act on Health Protection is under preparation to harmonize some of its components with the EU legislation. A Code of Heath Protection will be adopted.

Secondary and tertiary care

In the Slovak Republic, secondary health care is categorized as inpatient and outpatient specialist care due to different kinds of reimbursement (for more information on reimbursement, see section on *Financial resource allocation*).

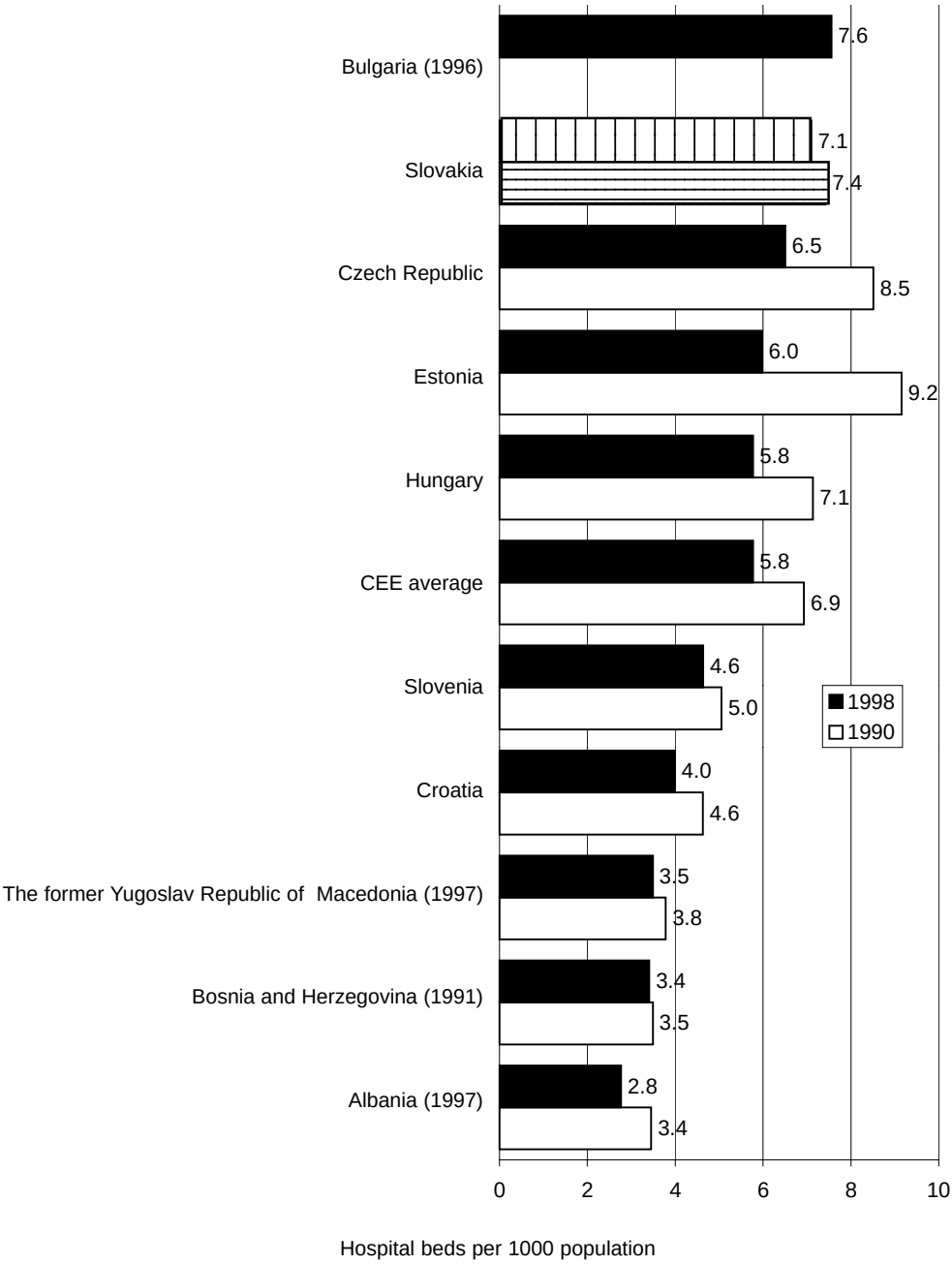
Many specialists, private or state, still have their offices in the polyclinics owned by the regional state administration offices. In 1998, 4025.5 specialists worked in secondary outpatient care as compared with 3583.5 specialist posts in 1990. This represents an increase of 12.3% in contrast with the 1.3% growth in primary health care. Approximately 44% of them were private, with contracts with the health insurance companies, while 56% were state specialists, employed by the health facility and salaried through a national pay scale.

In 1994, there were 84 hospitals, 23 specialized institutes and one maternity home in the Slovak Republic (*8*). Between 1990 and 1998, the average length of stay declined by 2.5 days (from 12.7 to 10.2). During the same period, the number of beds decreased by 9.8%, mainly due to administrative interventions by the Ministry of Health in 1997, and the bed occupancy rate increased to 79.5% in 1998.

This reduction in the number of beds in acute hospitals per 1000 people is lower than in many other countries in central and eastern Europe and numbers remain about one bed per 1000 higher than the CEE average (Fig. 8). If compared with neighbouring countries, the Slovak number is comparable to Germany's but higher than in Hungary, Austria or the Czech Republic (Fig. 9). Admissions per 100 population and occupancy rates are around the European average, while average length of stay is comparatively high (Table 5).

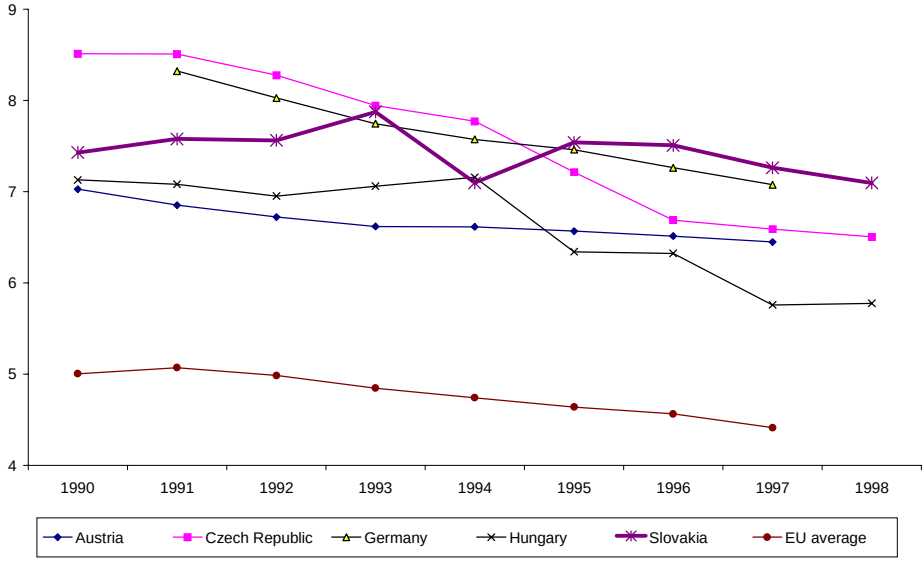
The categorization of hospitals has changed several times during the reform process. First, in 1995, the three-level classification under the socialist period was changed to a system with five types, each with its own reimbursement category. Since 1997, hospitals are categorized into four groups, as described

Fig. 8. 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. 9. Hospital beds in acute hospitals, Slovakia and selected countries, 1990–1998



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

earlier (*15*). The classification system comprises three types of hospitals plus teaching hospitals compared with three types of hospitals under the socialist-type system, where the type III comprised also the teaching hospitals. The profiles of the different types of the hospitals and the number of the population to be served closely resemble those before 1989. In 1997, there were 39 hospitals of type I, 27 hospitals of type II, and 11 hospitals of type III. The number of teaching hospitals increased from four and is currently six. These hospitals provide the most expensive health care. It is interesting that with growing financial problems in the health sector, the number of highly specialized hospitals has increased when compared with the situation before 1989. The share of inpatient care represents now around 45% of health insurance expenditure.

The number of physicians in hospitals has increased by 23.7% (from 4607 in 1990 to 5697 in 1998).

Highly specialized health care facilities have been extensively built up in recent years as the government proclaimed the dialysis programme, the plasmapheresis programme, the cardiovascular programme and the cancer programme as its high priorities. The aim of the dialysis programme was to build up dialysis centres so that every patient could have one within 50 km. The number of dialysis beds increased from 102 in 1990 to 351 in 1998. In the

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.

framework of the cardiovascular programme, seven centres for intervention and invasive cardiology and three cardiosurgery centres were established. In addition, the Cardiosurgery Centre for Children was built in the Faculty Children Hospital with Polyclinics in Bratislava. The Slovak Institute of Cardiovascular Diseases was placed in a completely new building. In 1998, the first heart transplantations were made. These programmes were financed from the State Health Fund and from foreign loans.

The provision of inpatient care currently suffers from many problems, caused by insufficient financing and oversupply, and inappropriately structured network of the inpatient health care facilities (*15*). Their reimbursement was last changed at the end of 1998 from per diem reimbursement to prospective budget payments. Prospective budgets for each hospital were prepared by the Ministry of Health based on historical costs taking into account main performance indicators. The reason for the introduction of the prospective budgets was to cap expenditure at a certain level. Hospitals have to operate with limited amounts of money that do not cover their present costs. The hospitals are in debt and their equipment is becoming obsolete due to very low capital investments. Frequently, the hospitals do not have the resources to purchase drugs and medical supplies to ensure appropriate services. A survey of patient satisfaction in the hospital sector is being planned.

Another common feature over the last few years is the overall fragmentation of the health care provision. The cooperation of the hospitals with the primary health care doctors has been weakened, resulting in much duplication. Past partnerships among the hospitals have been replaced by increased competition for scarce resources. The specialist culture still prevails.

Social care

Social care services include long-term inpatient care, day care centres and social services for the chronically ill, the elderly and other groups with special needs, such as the mentally ill, mentally handicapped and the physically handicapped. According to legislation in the Slovak Republic, such care is defined as *subsequent care*, special care and community care. Subsequent and special care are financed by health insurance companies, while community care is financed by the state budget or through direct payments.

Subsequent care follows acute care and includes nursing, rehabilitation, psychological and spa care. In 1994, there were six institutes with 665 beds for the long-term ill which mainly cared for elderly people (*8*). In 1997, their number had increased up to 14 with 1122 beds (*9*). However, their number is still

inadequate and patients sometimes have to wait several months to be admitted. On the other hand, as social care institutes charge fees, the institutes for the long-term ill are used by families to secure free-of-charge state care for their older and disabled relatives. In 1997, there were six rehabilitation institutes with 511 beds compared with one institute of 210 beds in 1994. The number of convalescent (recovery) homes decreased from 13 with 820 beds in 1994 to 12 with 702 beds, and 49 day and night *sanatoria* with 1462 beds in 1994 were reduced to 38 with 1095 beds in 1997. Many of them were privatized. The number of curative spas increased from 46 with almost 11 000 beds to 55 with 12 326 beds. All spas have been privatized. Slovakia funds spa treatment through the Health and Social Insurance Plans. Its share is continually declining. Out-of-pocket payments are also made for spa treatment.

Special health care includes psychiatric care and care of those with alcohol and drug problems. In 1994 there were some 11 psychiatric institutes with 3215 beds compared with 12 psychiatric facilities with 3310 beds in 1997. Three of them are categorized as highly specialized psychiatric hospitals with 2295 beds. Another three are psychiatric curative institutes with 1015 beds. The National Centre for Treatment of Drug Addiction and seven other centres have been established. In the framework of the National Programme of Fight Against Drugs, the Project of Needles and Syringes Exchange, the Programme of Vaccination against Hepatitis B for Drug abusers and the Project of the Methadone Substitution Treatment have been introduced. The infrastructure for care of the elderly is still insufficient, with 195 geriatric beds in 1998.

Community care has improved also by the creation of agencies for home nursing care. While in 1997 there were two such agencies, by 1998 their number increased to 79; 53 of them are private. Community and home care for the elderly and disabled is supported also by legislation which entitles persons who care for the disabled to social benefits. These forms of community care are increasing.

In 1994, the Ministry of Health ran eight institutions for infants, 12 children's homes and 20 residences with bed *crèches* for infants. They were all shifted to fall under the responsibility of the Ministry of Labour, Social Affairs and the Family. Most of them were further passed to the regional state administration authorities. Many institutes for community care were passed to municipalities and are under mixed ownership. Under the social system, the following community care facilities were operating by July 1998: homes for physically handicapped adults; homes for physically handicapped adults with additional mental handicaps; homes for persons with impaired senses; homes for mentally handicapped adults; homes for physically handicapped young people; homes for physically handicapped young people with partial mental handicap; homes for

mentally handicapped young people; homes for young people with impaired senses; and other social facilities. Their number reached 329 in 1998 with 27 293 beds (*18*). In addition, two facilities for handicapped adults are administered by churches.

In general, the capacity for social care has increased. The government will support a further expansion of community services. During 1999–2002, about 1500 hospital beds will be shifted to social care and 1000 hospitals beds transformed into the long-term inpatient care (*17*). Due to scarce financial resources, it is intended to define and differentiate health care from social care and to classify different types of facilities providing social care with the appropriate methods of financing. An estimated 20% of social care is still financed from compulsory health insurance. On the other hand, an interrelated network of health and social care facilities should be created to respond and address efficiently to health, health/social and social needs of the citizens.

Human resources and training

Legislation regulating the postgraduate and continuous training of the health personnel will be submitted to the parliament in the near future. As the planning of human resources closely depends on the definition of the necessary network of the health care facilities as discussed above, a policy document is under preparation. Postgraduate medical education is still mainly based on the Slovak Postgraduate Academy of Medicine which has a monopoly.

Undergraduate education of physicians is provided by three medical faculties in Bratislava (western Slovakia), Kosice (eastern Slovakia) and Martin (middle Slovakia). They are fully independent institutions affiliated to the universities. Enrolment in the medical faculties is not coordinated with health sector needs. In 1997, 3785 students attended the three medical faculties. Their number has been continually decreasing (4304 in 1994). Until 1991, there were four different kinds of medical graduates: general physicians, dentists, paediatricians and hygiene specialists. Since 1991, this has been changed to a single medical degree in general medicine and a dental degree, accompanied by a revised undergraduate medical curriculum. However, the concept of family doctor as a basis for undergraduate training of the primary health care physicians has not yet been introduced. In 1998, 625 students graduated in general medicine, which represented 11.66 graduates per 100 000 population. This is a little less than in Germany (13.68), but higher than in many other western European countries, such as the Netherlands (8.86), France (9.38) and the United Kingdom (6.34). The number of graduated medical doctors has increased by 221 since 1990

(404 and 7.63 per 100 000 population). Sixty-four medical doctors graduated in dentistry (stomatology) in 1998, which accounted for 1.19 per 100 000 and is less than in many European countries. Their number has increased by 27 since 1990 (*37*).

Nurses as well as other paramedical personnel graduate from 33 secondary health schools distributed throughout the whole Slovak Republic. Their number increased from 23 in 1987. Their number and profile is now under review. Most of the secondary health schools are financed and regulated as *budgetary organizations* by the Ministry of Health. The responsibility for seven secondary health schools was passed to religious organizations (churches). These are contributory organizations, only partly supported by the state and study is free-of-charge. Their graduates comprise general nurses, children nurses, dieticians and nutrition assistants, laboratory technicians, pharmaceutical laboratory technicians, dental laboratory technicians, radiographers, physiotherapists, opticians and orthopaedic prosthetic assistants. In 1997, 9452 students attended the secondary schools in comparison with 14 237 students in 1994. Nurses can train at any of six different levels: 1. four years of training from the age of 14–15 (after completion of basic school education); 2. two years from the age of 18 (after completion of secondary school education); 3. a higher professional diploma; 4. a bachelor of nursing degree; 5. a masters degree; or 6. a doctorate. Specialization in a particular branch of nursing takes 1½–2 years after basic qualification. Midwifery and paediatric nurse training have separate training programmes. The highest number of 4115 graduated nurses was reached in 1995 in comparison with 2171 in 1990 and 2684 in 1998.[3] This represented 50.7 nurses per 100 000 population in 1998, which is higher than in most western European countries. In 1998, 1.32 midwives per 100 000 population graduated in Slovakia, which is comparable with Switzerland. The education programme for midwives will be strengthened in the future.

The Faculty of Nursing started to train nurses. In 1997, 27 nurses graduated with a university diploma. Their number is increasing and reached 131 full-time students in 1997. Many nurses use the option to study as part-time students. A draft act on nursing is being developed. It will also regulate the education of nurses and will introduce an obligatory certification for nurses. Now, nurses and other paramedical health personnel working in the private sector have to be members of the Slovak Chamber of Paramedical Personnel (Nurses).

The Slovak Postgraduate Academy of Medicine provides postgraduate education and continuing education to physicians and nurses. In addition, many other health care facilities have been empowered to provide postgraduate and continuous education. This process should be regulated and controlled by

[3] Source: Institute of Health Information and Statistics, 1999.

professional bodies and accreditation in the future. All practising physicians must pass the *First Attestation* (level), which involves 2½–3 years' training. Further specialization lasting 3½ years is possible in all branches of medicine, including general practice. Since 1991, specialization in general medicine has been mandatory in order to work as a primary health care physician. Many unsolved problems, such as method of financing, legal issues and others, remain regarding postgraduate and continuous education of the private physicians and nurses.

Pharmacists graduate at the Pharmaceutical Faculty in Bratislava. In 1998, the number of graduated students reached 189, which is 3.53 graduates per 100 000 population. It is higher than in many western European countries such as Germany (2.51) or the United Kingdom (1.25). In comparison with 1990, the number of graduates increased by 88.

In recent years, a number of opportunities in management training have been provided and supported by various domestic and foreign agencies. However, the qualifications have not yet been officially recognized.

Health workers in the Slovak Republic are highly qualified and every doctor and nurse has the opportunity to retrain. However, health professionals' education will have to be changed to meet the requirements of the European Union legislation. In the Slovak Republic, family practitioners have not yet been officially recognized. The nursing curriculum and the age at which students can begin to study nursing is to be changed (at present, study can start at 14–15 years of age). In recent years, a bachelor degree of nursing and a diploma of general nursing and physiotherapy have been introduced. Training of health professionals in primary health care is also to be strengthened.

In 1997, from the total number of 106 369 persons (FTE) working in the health sector, the number of FTE physicians was 17 228. While 10 273 of them still worked in the state health care facilities, 6956 had become private. The number of nurses was 48 756. One general practitioner served an average of 2059 adults, and a paediatrician rendered services to an average of 1412 children and adolescents. There was one gynaecologist per 6715 women and one dentist per 2453 persons. While in the first two cases, the number of patients has not changed substantially since the beginning of the 1990s, the average number of patients per gynaecologist and per dentist has declined.

The development of the number of health care personnel since 1980 is given in Table 6. In 1998, the number of physicians entering the work force was 3.44 per 100 000 population (about one half of the figure for the United Kingdom and one quarter of Germany's figure) while the corresponding figures for dentists, pharmacists, nurses and midwives were 0.48, 0.33, 7.44 and 0.42 respectively.

In 1998, the number of physicians per 1000 population was 3.5, comparable to neighbouring countries such as Germany or Hungary and slightly higher than in Austria or the Czech Republic (Fig. 10 and Fig. 12). The number of physicians per 1000 population has increased since 1995.

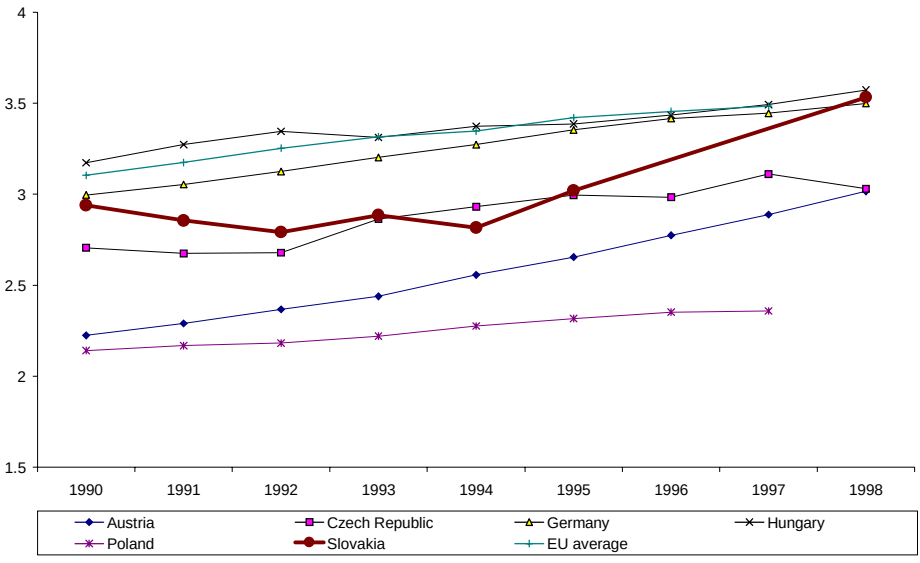
The number of nurses (7.4 per 1000 population in 1998) is higher than in almost all other CEE countries and is comparable to western countries such as Denmark, Switzerland or Luxembourg (Fig. 12). Compared to neighbouring countries (Fig. 11), the number is lower than in the Czech Republic and Germany but higher than in Austria and Hungary. As with physicians, the number of nurses per 1000 has increased since 1995.

Table 6. Development of health care personnel, 1980–1999

Personnel	1980	1985	1990	1995	1996	1997	1998
Active physicians	14 107	16 205	17 347	16 565	16 333	17 228	18 508
Active dentists	2 252	2 540	2 574	2 136	2 118	2 347	2 610
Certified nurses	29 760	34 878	37 127	37 655	–	–	39 862
Midwives	2 272	2 386	2 567	2 098	–	–	2 258
Active pharmacists	1 638	1 893	2 050	496	–	–	1792
Physicians graduating	683	462	404	699	938	678	625
Nurses graduating	1 973	2 335	2 171	4 115	3 494	2 682	2 684

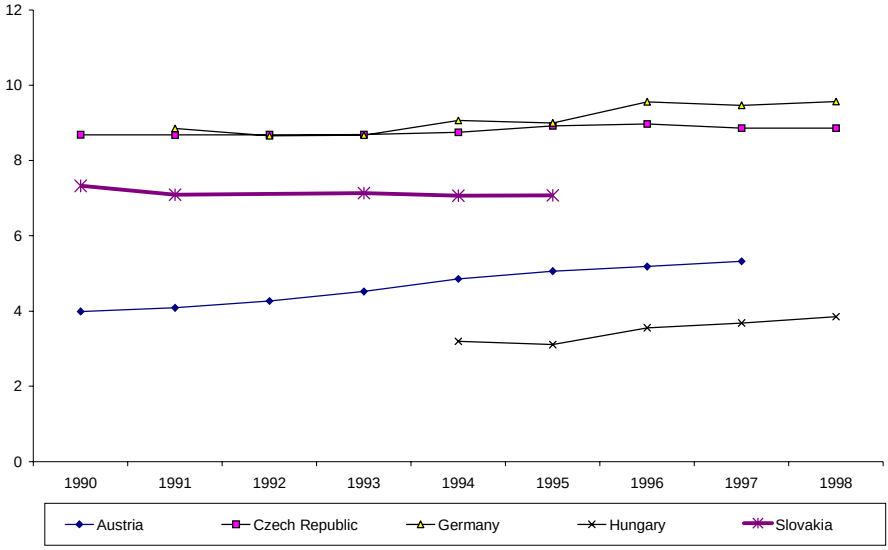
Source: Institute for Health Information and Statistics, 1999.

Fig. 10. Physicians per 1000 population, Slovakia and selected countries, 1990–1998



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

Fig. 11. Nurses per 1000 population, Slovakia and selected countries, 1990–1998

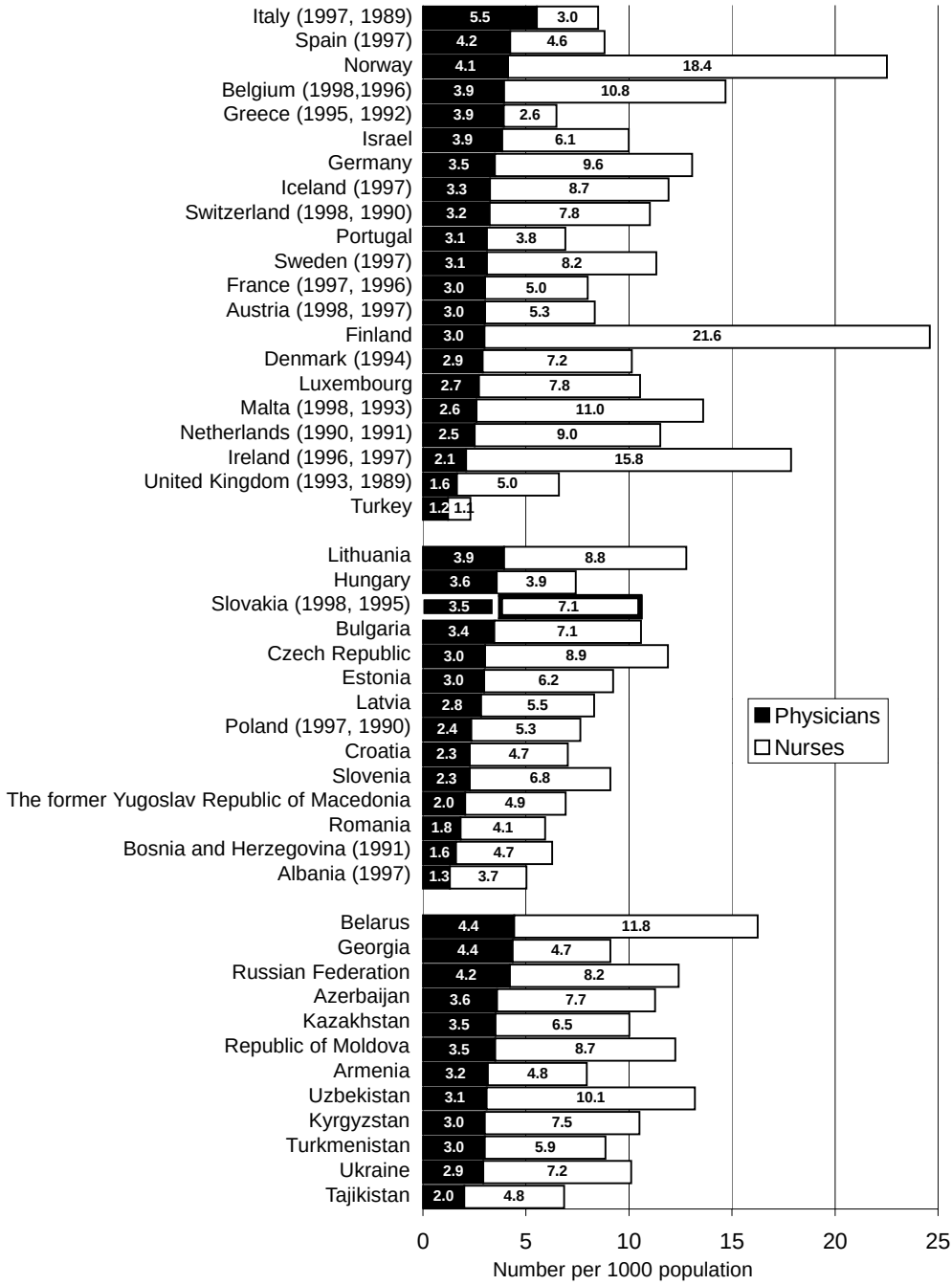


Source: WHO Regional Office for Europe health for all database.

There is an excess of physicians and nurses in some areas and in some facilities, especially in small towns. There is no general shortage of nursing staff anywhere, with the exception of Bratislava. It is expected that firm implementation of health insurance reimbursement schedules together with development and implementation of standards in health care provision will adjust these inequalities. However, such standards (the network, minimal health personnel standards, etc.) are still under preparation. The shift to independent contractor status in primary health care has moved some physicians and nurses into the primary care sector. In 1998, a nursing unit, with the post of Chief Nurse, was introduced at the Ministry of Health. At present, however, the medical profession dominates nurses and other health care professionals. A draft Act on Medical Profession is being submitted to the parliament, while the draft Act on Nurses is still under discussion.

In 1995, an average monthly salary was about SKK 10 000 for a physician, and SKK 8000 for a nurse, about 20% higher than in 1994. This included payment for night (on-call) and emergency services. Increasing the income of health care workers has been one of the government's priorities. It adopted the policy document on long-term stabilization of physicians and other health personnel, which designed three stages of the remuneration increase. In the first

Fig. 12. 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.

quarter of 1998, the average monthly salary reached SKK 19 285 for physicians and SKK 9224 for nurses (*14*), i.e. physicians earn twice as much as, and nurses slightly less than the average monthly wage of SKK 10 003. The social status of physicians and nurses is still considered low and there are complaints within these professions. While incomes of private physicians were relatively high at the beginning, they now experience difficulties due to insufficient and delayed payments from the health insurance companies. In addition, the latter imposed limits on the volume and range of services provided, which resulted in a substantial demotivation of primary health care providers. At present, full capitation has been introduced.

Pharmaceuticals and health care technology assessment

The area of drug policy has been the most difficult in the health care reform. In particular, difficulties with excessive drug consumption have led to problems in health care financing. Today, about 30% of the total health care expenditures are on drugs (*16*). An additional 2.5% is spent on medical supplies. Expenditures on drugs have grown rapidly since 1991. One of the reasons has been that the Slovak Republic was initially one the countries in which drugs were practically free-of-charge. On one side, it led to over-prescription of drugs by doctors while, on other side, it encouraged a growing demand by the population for the most modern and often the most expensive drugs. The intensive marketing campaign by pharmaceutical companies in a new market environment, often through the health care providers and forms of hidden advertising, fostered this growing demand. By introducing the compulsory health insurance system, the situation has not improved. To the contrary, a very liberal system of drug regulation led to a rapid growth of health insurance companies' expenditures on drugs. While in 1991 these accounted for CSK 3.3 billion, in 1992 CSK 4.5 billion, and after the introduction of the compulsory health insurance, the costs of the health insurance companies on drugs reached SKK 8.3 billion in 1994, SKK 11.8 billion in 1995, and SKK 14.9 billion in 1996 (*3*). In 1998, after the introduction of some regulatory mechanisms, drug expenditures declined to the level of SKK 13.4 billion. In 1995, about 9000 drugs (excluding homeopathic and herbal medicines) were registered and the Ministry of Finance has approved price categories for about 5000 of these (see the section on *Out-of-pocket payments*). The first category of drugs (fully reimbursable by the health insurance companies) comprised about 40% of the total; 27% of drugs were partly reimbursable and only 8.7% of drugs were not reimbursable at all.

The remaining drugs were fully reimbursable but they are used exclusively in inpatient facilities. The new categorization of drugs as described above has not improved the situation. In 1996, to reduce drug consumption in hospitals, the Minister of Health issued the Decree on Hospital Formularies. The prescribing of drugs for outpatient care was restricted by the Ambulatory Formulary as a legally binding document in August 1998. It comprised in total 1533 drugs, of which 375 were of domestic production. In November 1998, this formulary was amended to 1623 drugs, of which 396 were of domestic production. This regulation, in addition to limitations on the prescription practice of physicians in outpatient care, also imposed pressure on wholesalers to reduce prices. Certain drugs for specific diagnoses can only be prescribed by specialists. There are also strict rules concerning the issuing of drugs by pharmacies. They can issue only the drug which is prescribed. Before, the various packages of the generic drugs were interchangeable. Now, the analysis of drug expenditures is provided monthly by health insurance companies. Recently, a new categorization of drugs has been introduced excluding some drugs from the reimbursement scheme. Maximum prices of drugs to be reimbursed by the health insurance companies, i.e. reference prices, have been also defined. This is expected to slow the growth of drug costs.

In 1999, the health care facilities and inhabitants were well supplied with drugs and medical aids through 1045 public pharmacies and 86 hospital pharmacies and 81 facilities issuing medical aids. Privatization led to a growth of public pharmacies from 500 in 1993 to 1045 in 1999. Hospital pharmacies remain state-owned. While in 1990 there was one state wholesaler MEDIKA, their number reached more than 260 in 1997. After a thorough control carried out by the Ministry of Health in 1997, their number declined to the current 162[4] along with the state enterprise MEDIKA. These pharmacies should supply required drugs within 24 hours.

In 1998, the Act No. 140/1998 on Drugs was adopted to meet the requirements of EU legislation. It creates a basis for a new system of drug registration, control over production, distribution and sale of drugs, etc. The act had to be amended a few months later and further amendments will be necessary. The State Institute for Drug Control executes many tasks laid down in the act.

The drug market has changed substantially since 1989. Previously, domestic production accounted for about 80% of drug consumption. This has fallen to 17.6% and Slovak-owned pharmaceutical companies produce only 11% of the domestic drug market. The biggest pharmaceutical plant is SLOVAKOFARMA, which produces generic drugs, particularly for cardiovascular and gastric

[4] *Source*: Ministry of Health, 1999

diseases and analgesics. The state enterprises IMUNA produces blood derivatives, physiological infusions, some vaccines, etc. Another twelve private companies for mass production of drugs have been established.

In 1996, the government adopted the National Drug Policy. It intends to prepare a new policy document on this topic in 2000, to develop such categorization of drug and methods of their reimbursement to contain costs on drugs at the level of SKK 12 billion. It should be supported by the enforcement of principles of rational pharmacotherapy and by a new system of drug pricing. One of the most important challenges for the future will be education of the population in the area of drug consumption.

In the early 1990s, a massive purchase of medical technology, mainly through leases or as gifts, provoked increased costs on hospital care. Having acquired high-technology equipment, hospitals have often struggled with difficulties to finance the operation of the equipment. Since 1995, purchases have to be approved by the GHIC and the Ministry of Health (depending on the price). An inventory of high-technology equipment has been performed. The analysis shows a low utilization of the technology and enormously high operation costs in many cases.

Financial resource allocation

This section will focus on processes by which financial resources flow from the health insurance companies to the health care organizations or directly to the private health care providers. The health insurance companies administer only compulsory contributions, mainly collected directly from insured persons. They are the main authorities paying for health care provision, jointly covering between 98% and 99% of all health care services. The health insurance companies do not directly cover capital investments and other costs (Fig. 13). Their operation is regulated by the Act on Health Insurance and the Act on Therapeutical Order.

Third-party budget setting and resource allocation

The health insurance companies represent third-party payers. There are five insurance companies which are legal public bodies. Insurance companies have their networks in the whole country according to their actual needs. There are not defined geographical areas to be covered by the individual health insurance company. The companies sign the contracts with the individual health care providers. The contracts are independent and one health care provider may issue a contract with all five health insurance companies and vice versa. The health insurance companies pay for services by the state as well as for private health care providers. There is no separate system to cover private health care providers. The main source flowing to the health insurance system is from the collection of contributions from the insured persons. In 1998, it represented about SKK 31.71 billion. In that year, the state contributed on behalf of economically inactive persons to the health insurance system an additional SKK 10.6 billion, which was about 25% of all contributions. The allocation by the state is approved by the parliament in the Act on State Budget. The budgets of the General Health Insurance Company and the Common Health Insurance

Company for the forthcoming year are also approved by the parliament. Three other health insurance companies approve their budgets through their own mechanisms.

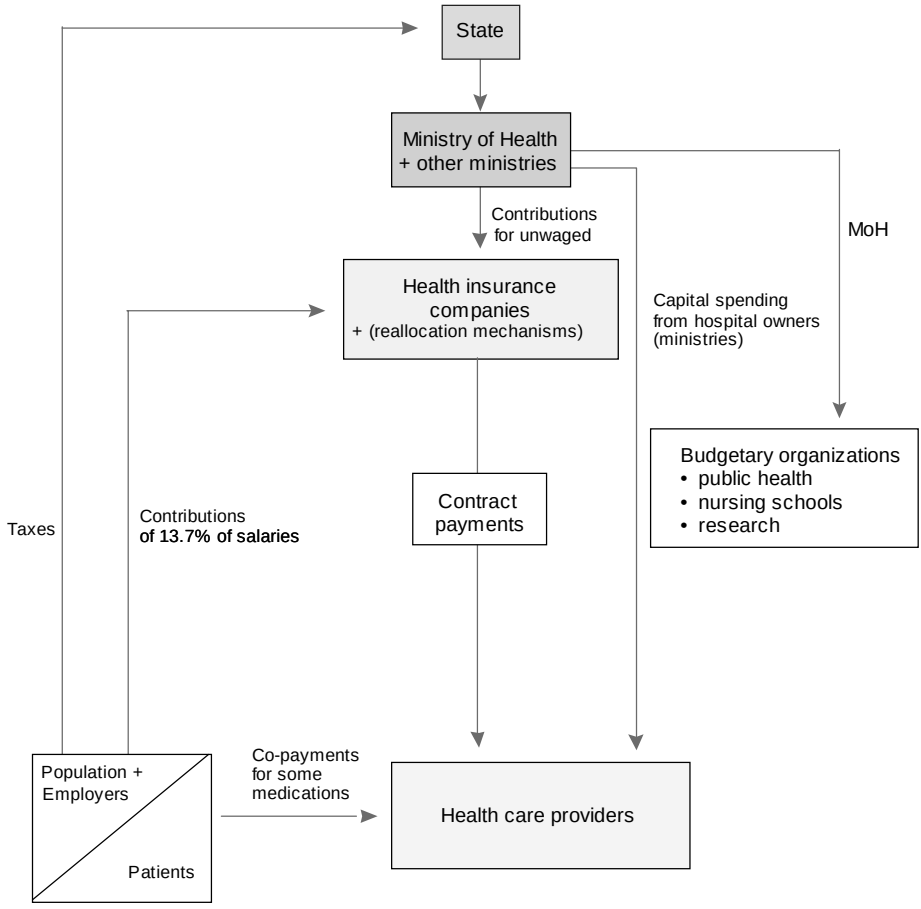
Until recently, the allocations to different programmes such as primary health care, outpatient specialist care, inpatient care and drugs were based on the health care services provided and invoices submitted. Due to uncontrolled growth in some of them, in 1997 the Ministry of Health agreed with the health insurance companies to define an orientation distribution of the resources to each programme. However, this was not pursued.

The system of resource allocation is decentralized. The amount of money allocated to each health care provider is negotiated in the contract. The systems of reimbursement are prepared by the Ministry of Health in cooperation with the Ministry of Finance. Health insurance companies are involved in this process; they cannot, however, decide on this issue themselves. They have a dominant position in the contractual relationship and sometimes change the conditions already agreed upon in the contract. The main weaknesses are delayed payments to the health care providers, extending in some cases to several months, and only partial reimbursement of the agreed amount. In the past, the health insurance companies changed the agreed volume of services purchased from the health care providers.

Payment of hospitals

Since the introduction of the health insurance scheme, methods of hospitals payments have been changed several times, mostly reflecting changes in government. In 1993, the German fee for service based "points" system was introduced (see the HiT on Germany for details on this "Uniform Value Scale"). One perceived advantage of this was that it would generate hospital activity data and make the measurement of hospital services possible. For some time, many hospital directors continued to use this system to assess the effectiveness of individual departments. It was replaced with a combined system of payment by bed-days and points, but this was abolished after two months. Beginning in July 1994, hospitals were paid only by bed-days. A daily charge for a bed-day was defined for each of the then existing five hospital groups, increasing from the first to the fifth. The rates were defined after negotiations among the Ministry of Health, the Ministry of Finance, health insurance companies and hospitals. A Ministry of Finance Decree was then issued on bed-day prices. Hospitals invoice the health insurance company for their services. Following the 1995 amendment of the Act on Health Insurance, insurers had to pay hospitals 80%

Fig. 13. Financialflow chart



of the estimated costs in advance and settle the final account within four months. However, this was not completely enforced in practice. As the charges were fixed, independent of length of stay or diagnosis, hospitals treating the long-term ill in acute medical wards were at an advantage while those providing mainly surgery or intensive care fell into debt. This system also gave incentives to hospitals to increase length of stay. In addition, the prices of bed-days did not cover the real costs of hospitals which might have led to a decline in quality of care. According to some calculations, costs exceeded prices paid by the health insurance companies by up to 30%.

Since 1998, the retrospective system of payment for hospital services has been replaced by prospective budgets. These were calculated by the Ministry of Health based on historical costs and taking into account other indicators. The prospective budget is divided among the different insurance companies based on the number of insured persons treated in the appropriate hospital in previous months and on the volume of services provided to the insured.

Delayed reimbursement by the health insurance companies, which did not cover all health services provided by the hospitals, growing demand and prices of supplies, etc., led to the current poor financial performance of most hospitals. Some debts exceeded hundred millions of Slovak crowns. The debts of the health care facilities reached SKK 9.9 billion by 30 June 1999.[4] On the other hand, the health insurance companies owe them about SKK 6.4 billion.

In addition to formal hospital reimbursement, informal payments exist. However, their amount is difficult to estimate.

Payment of physicians

State-employed physicians are salaried according to national pay scales. This applies to those in hospitals and outpatient clinics. Private physicians in primary and in secondary care have direct contracts with health insurance companies.

During the last few years, the system for paying the primary care physicians has changed several times. In 1993, a points system was introduced for outpatient care as well as for inpatient care (see above). It was replaced with a 100% capitation system in October 1994. Dentists chose to continue with the points system. In 1998, based on the Act No 98/1995 on the Therapeutic Order, a "combined system" was introduced – a combination of 60% of payments by capitation and 40% by the points based fee-for-service system. Dentists continue to be paid exclusively on a fee-for-service points system. Privately contracted doctors were at an advantage over public institutions by multiplying the price for each point by a coefficient. This facilitated the start of private practices. Private physicians pay salaries to their nurses or other staff, and rent rooms and equipment. Rental charges are limited by a maximum price. The system of primary health care reimbursement was considered satisfactory until 1998 as it was expected to allow physicians in private practice to earn in relation to their skills and effectiveness. However, the new government declared this system of open-ended financing as unsustainable and replaced it with the 100 % capitation. Capitation rates are set by the Ministry of Health and are issued by the Ministry of Finance. The maximum rates are set differently for GPs for children and

[4] *Source:* Ministry of Health, 1999

adolescents, for general practitioners for adults and for gynaecologists. Apart from that, they do not yet differ by age, region or any other variable. Usually, all health insurance companies pay the maximum rate, so the capitation rates do not differ between insurers.

For private office-based specialists, outpatient care services are reimbursed according to a fee-for-service principle (on a points basis). Through limits placed on the providers on the volume and types of services they can provide in a month, total reimbursement is limited. On the other hand, state specialists are salaried in accordance with national pay scales, with nurses and health personnel employed by the appropriate health care facility. In this case, the health care facility receives the payment as a points-related lump sum from the insurer. Currently, new offices that will widen the network are not permitted to be established. The proportion reached between private and state outpatient specialists is considered as well balanced. Outpatient secondary care accounts for about 5% of all health care expenditures (*16*).

Health Care Reforms

Aims and objectives

The health care reforms in the Slovak Republic were initiated by the radical political, social and economic changes following the so-called "velvet revolution" in 1989. They were influenced by the overall desire to move towards a democratic society with a market-oriented economy. The process of reform in the health sector was mainly driven by medical doctors who pushed the Ministry of Health. There was a strong political decision to replace the socialist health system with the regulated market-like system based on health insurance. In 1990, the government adopted the document "Reform of Structure, Management and Financing of Health Care". It identified a number of drawbacks in the centrally-planned socialist health system. The overall system of structure, management and financing was declared as no longer sustainable.

The main objective of the health care reforms has been to improve the health status of the population. This should be ensured by radical changes in the structure, management and financing of health care by pursuing the following goals:

- to remove the state monopoly on the health care providers and to achieve a balance between non-state and state health care providers;
- to establish an economic relationship between the health care provider and the patient;
- to improve the income of the health care providers;
- to remove the dependence on one source of financing and to renew the interdependence of the health and economic management;
- to improve curative and preventive care and its material and technical basis;
- to renew the positive attitude of citizens towards their own health;
- to introduce free choice of health care provider;

- to improve the social status of health professionals through the introduction of a reward system based on performance, to ensure their high morale and their responsibility for health care provision, which should be monitored by thorough state control with the cooperation with the medical chamber and other professional organizations etc.

As the government changed, different priorities were emphasized, but the main strategies – health care financing through insurance as well as privatization and decentralization of provision – did not change.

Today, after almost ten years of reforms, the health system has not reached all its envisioned goals. It has struggled due to frequent changes and overall lack of financial resources.

Reforms and legislation

In 1991, the Regional and District National Institutes of Health were abolished, leading to the creation of about 3000 autonomous Health Care Facilities – each managed and financed directly by the Ministry of Health from the state budget. Amendments were made to Act No. 20/1966 to enable privatization of Health Care Facilities.

In 1992, the Institute for the Introduction of the Health Insurance Plan was established to finance health care facilities according to the services provided. However, the Institute operated through the state budget and its main task was to prepare a health insurance act and to develop health insurance infrastructure.

The Constitution of the Slovak Republic came into force on 1 January 1993. It guarantees universal coverage of comprehensive free-of-charge health care services based on compulsory health insurance. During the following health care reforms, a number of legislative norms were adopted to enforce these rights. First, in 1993, the insurance scheme started. At the beginning, contributions passed to the state budget and health care providers were financed through a prospective budget based on historical costs.

In 1994, the National Insurance Agency with its separate Health Insurance Fund, Sickness Insurance Fund and Pension Fund began to operate independently of the state budget. The reimbursement system was subsequently changed twice, with the final result a capitation system for outpatient care and bed-day reimbursement for hospitals.

In December 1994, a new Government was appointed and approved a document on updating the privatization process in the health sector. This led to the privatization of all pharmacies (excluding hospital pharmacies). Privatization

of primary health care was accomplished by the end of 1996. Private doctors' higher incomes have led to some shift from inpatient secondary health care to primary care. The retraining of physicians was provided to facilitate this process. By 1997, almost all spas facilities became private and the privatization of outpatient specialist care began.

In 1995, the new government adopted the health policy document called the Continuing of Transformation of Health Sector. This elaborated in detail the priorities and tasks laid down in the Proclamation of the Government. The main emphasis was on improving health status of the population and quality and effectiveness of health care provision through competition among health care providers. To avoid uncontrolled increases of costs (e.g. numbers of investigations, referrals and prescriptions), upper limits were introduced.

In 1996, the health policy document "Complex of Measures, including Legislative Steps pursuing Economization and more Efficient Utilization of Resources to Improve Quality of Health Care concerning Drug Policy, Control, Pricing, Interconnection between Health and Insurance, and Network of Health Care Facilities" was submitted to the parliament to propose ways for containing costs and improving the financial situation in the health sector.

In 1996, the government approved the "Concept of Drug Policy". It dealt with principles in drug legislation, registration of drugs and approval of medical aids, categorization, rational pharmacotherapy, domestic pharmaceutical research and pharmaceutical industry, quality and safety of drugs, their supply and access, the monitoring of drug consumption, drug pricing, health education and information on drugs, advertisement of pharmaceuticals.

In March 1998, the Government approved the "Report on the Analysis of Economic Development in Health Insurance Companies, Health Care Facilities, Reasons of Unfavourable Development in the Health Sector and Definition of Problems of Financing Health Care with Proposal of Measures for Their Improvement".

In December of the same year the new government, in its programme proclamation, committed itself to ensuring universal access to the outpatient and inpatient care of good quality and to controlling and containing health care costs. These goals can only be achieved by a new fast and well-prepared comprehensive reform of health care.

Below, all acts are presented in the order in which they have been passed:

- The Act No. 518/1990 on Transfer of the Establishment Role to Municipalities, State and Local Administrative Bodies and Act No. 138/1991 on Municipality Property allowed ownership of local health centres to be passed to the Municipalities. However, this opportunity has not yet been used.

- The Act No. 92/1991 on Conditions of Transition of State Property to other Bodies enabled, through later amendments, privatization of health care facilities.
- The Act No. 7/1993 on the Establishment of the National Insurance Agency and on Financing Health Insurance, Sickness Insurance and Pension Insurance established and regulated the National Insurance Agency; the financing implementation of compulsory health insurance, sickness insurance and pension insurance. The National Insurance Agency in turn created the health, sickness and pension insurance funds for each separate kind of insurance.
- The Act No. 9/1993 on Health Insurance and the Management of the Health Insurance Fund regulated the Health Insurance Plan and its financial management. According to this act, health insurance became the basis of funding for disease prevention, illness, accident prevention and in the event of accident. It also defined the personal scope of health insurance, the limits of health insurance and the framework of necessary health care.
- The Decree No. 220/1993 on Promulgating the Therapeutic Order regulated the system, scope and conditions for the provision of necessary health care financed by the Health Insurance Fund.
- The Ministry of Health's Public Notice on the Scope and Conditions of Reimbursement by the National Insurance Company for the Provided Health Care to the Contractual Health Establishments regulates the National Insurance Company and regional insurance companies to reimburse health establishments for health care provided under conditions stated in the List of Health Services and in the Lists of Drugs, Medical Aids and Medical Supplies which constituted annexes to this public notice. The reimbursement of health services was carried out on the basis of a "points" evaluation. The maximum price of one point, the prices of drugs, medical aids and medical supplies were issued by the Ministry of Finance.
- The Act No. 276/1993 on the Insurance Company of the Ministry of Interior and on financing health insurance established the Ministry of the Interior Insurance Company.
- The Decree No. 18/1994 on Promulgating the Therapeutic Order of the Ministry of Interior Insurance Company regulated in detail the conditions and the scope for the provision of health care financed by the Ministry of the Interior Insurance Company.
- The Act No. 92/1994 on the Military Health Insurance Company established the position and tasks of the Military Medical Insurance Company. A Therapeutic Order was also passed for this insurance company.

- The Act No. 201/1994 on Health Insurance of Railway Workers and on the Railway Health Insurance Company regulated the health insurance of Railways employees and established the Railway Health Insurance Company, its organization, activities and financing.
- The Act No. 273/1994 on Health Insurance, on Financing Health Insurance, on Establishment of the GHIC and on Establishment of the Sector, Branch, Enterprise and Civil Health Insurance Companies regulates health insurance, established branch, enterprise and civil health insurance companies their organization and financing. It abolished Acts No. 7/1993 and No. 9/1993 and their respective regulations.
- The Act No 272/1994 on Health Protection of People introduced the basic terms such as "health", "health protection", "healthy living and working environments". It lays down the rights and duties of local authorities, municipalities, other statutory bodies and individuals. It also defines state administrative execution and state health supervision in the field of health protection and states the functions of chief hygienist, district and sub-district Hygienists.
- The Act No. 277/1994 on Health Care lays down the conditions for health provision, rights and duties of persons entitled to health care as well as rights and duties of health workers and health organizations. It creates a framework for regulating issues which arise from health care provision together with the acts regulating health insurance and health protection. In comparison with the previous Act (Act No. 20/1966 on Health Care for the Population), several changes were made. Citizens are obliged to take care of their own health and the uninsured are provided with health care for a fee. Conditions for provision of specialized health care such as transplantation, sterilization or artificial fertilization are regulated. Health care provision in non-state health establishments and spas and springs and mineral drinking-waters are regulated. Sanctions for breach of measures on protection of natural curative springs are introduced. This Act defines health care provision, its organization, the rights and duties of individuals and statutory bodies in ensuring this care.
- The Act No. 98/1995 on the Therapeutic Order regulates conditions governing provision of health care and medical aids through health insurance, on co-payment or full payment.
- On 1 November 1995, the amendment of Act No. 273/1994 came into force defining stricter conditions for redistribution of compulsory contributions between health insurance companies and introducing more rigorous conditions for the establishment and operation of health insurance companies. Amendments also redefined the role of state control in the health insurance

plan. This amendment led to a decrease of the number of the health insurance companies

- In 1996, the Act No. 219/1996 on Protection Against Misuse of Alcohol and on Establishment and Operation of Anti-alcoholic Retaining Premises shifted the responsibility for these services to the municipalities and ensured the close cooperation with the health services.
- The Act No. 222/1996 on Organization of Local State Administration resulted in a change in organization of the health state administration. Subdistrict state physicians and hygienists were replaced by district ones, and district state physicians and hygienists by regional ones. Their competence was strengthened. Some facilities were passed to the regional offices of state administration.
- The Directive of the Ministry of Health No. 40/1997 Defining the Standards on Minimal Personnel and Material and Technical Equipment of Some Types of Health Care Facilities, issued in November, was supposed to regulate the uncontrolled issue of licenses for private practice. However, it was found to be in contradiction with other legislation.
- The Act No. 67/1997 on Protection of Non-smokers laid down a basis for better prevention and control of smoking. Smoking in public premises, in the health care facilities and schools is forbidden as well as any form of advertisement of tobacco products.
- The Act No. 202/1997 amended the Act on Health Insurance concerning the redistribution mechanism of the health insurance contributions.
- The Act No. 251/1997 amending Act No. 98/1995 on Therapeutical Order introduced a more flexible method of categorizing of new registered drugs and medical aids based on ATC classification.
- The Act No. 280/1997 on the Common Health Insurance Company created a legal basis for the merger of the Health Insurance Company of Ministry of Interior, Railway Health Insurance Company and the Military Health Insurance Company, which used to be regulated by separate Acts.
- The Act No. 332/1997 was another amendment of the Act on Therapeutical Order to exclude some procedures from the compulsory health insurance and adjust the reimbursement of some diagnostic procedures.
- The Act No. 124/1998 amended the Act on Health Insurance in area of the redistribution and central registry.
- The Act No. 139/1998 Act on Narcotic Substances, Psychotropic Substances and Agents regulates the manipulation with the substances listed harmonized this area with the international norms.

- The Act No. 140/1998 on Drugs and Medical Aids was the first act in this area. In accordance with the EU legislation it regulates the process of manipulation with drugs and medical aids, their testing, registration of drugs, approval of medical aids, ensuring and control of quality, efficiency and safety and the tasks of the state administration in this field. The manipulation comprises production of pharmaceuticals, wholesaling and provision of pharmaceutical services in the pharmacies and in other facilities. The act stipulates that only pharmacists can own the pharmacies.
- The Act. No. 239/1998 amended again the Act on Health Insurance.
- The Act No. 241/1998 amended the Act on Health Care.
- The Edict No. 274/1998 of the Ministry of Health regulates the good production practice and the good wholesale practice to meet the requirements of the Pharmaceutical Inspection Convention.
- This was accompanied by the Notice of the Ministry of Health No. 275/1998 on pharmaceutical testing and toxico-pharmaceutical testing.
- The Act No. 303/1998 amended the Act on Health Care to adjust obligations of non-state health care providers, including reporting and other areas.
- The Act No. 11/1999 amended again the Act on Health Insurance concerning the self-governing bodies.
- The Act No. 56/1999 amended once more the Act on Health Insurance, this time in area of the assessment basis for the calculation of contributions.
- The Act No. 151/1999 was yet another amendment of the Act on Health Insurance changing the redistribution mechanism and the guarantee of the State.

The frequent amendments of the Act on Health Insurance dealt mainly with the redistribution mechanism and the contributions. The Act on Therapeutical Order was amended several times particularly due to categorization of drugs.

Health for all policy

In 1991, the National Health Promotion Programme, based on the health for all strategy, was adopted by the Government and in 1992 by the Slovak National Council. In addition, the State Health Fund was founded and the National Health Promotion Centre established. The Coordination Board of Ministers was established to coordinate the implementation of the Health Promotion Programme. Despite this, the National Health Promotion Programme has not been implemented, mainly as a result of lack of financial resources and an absence of shared commitments from other sectors.

In 1994/95, the State Health Policy based on the WHO health for all policy laid down the basis for further elaboration through three separate documents dealing with various aspects of the health for all targets. The Health Policy for Europe 1991 with disease prevention and health promotion, healthy environment and appropriate care led to the Updated National Health Promotion Programme (1995), the health policy document "Continuing Transformation of the Health Sector and Principles of Public Health Policy" (1996) and the "National Action Programme on Environment and Health" (1997). Currently, the National Health Promotion Programme and the National Action Programme on Environment and Health are under review to prepare new health policy documents in accordance with the Health 21 – health for all in the twenty-first century. The Continuing Transformation was recently replaced by the new health policy document Transformation Steps in Health Sector for 1999–2002. This is based on the principles of health for all strategy for twenty-first century.

Reform implementation

The implementation of health care reforms in Slovakia has been largely driven by the government. Changes have been recommended following consultation with Expert Groups which comprise representatives of health professionals (the Slovak Medical Chamber, the Slovak Pharmaceutical Chamber, the Slovak Chamber of Dentists, the Slovak Chamber of Nurses and representatives of other health workers), the health insurance companies (through its association) and the Hospitals Association. The role of the Physicians Chamber has often been to resist change. Despite several changes of government, the main direction of health service reform has changed little as the political parties agree on issues relating to health care. Incoming officials largely restricted themselves to changing the reimbursement schedules of the health care providers, categorization of drugs and the process of privatization.

Most of the initial reforms have been implemented. The previous system of financing was replaced by the compulsory health insurance system. The structure and organization of the health care was changed. The primary health care providers and pharmacists became private. Many specialists working in outpatient care have also turned to private practice. Almost all spa facilities have become private. The state monopoly on health care provision was thus markedly reduced. However, most hospitals remain under state ownership with centralized management. The process of decentralization has not been fully accomplished regarding the state administration in health care and the municipalities.

The health insurance system began to function in 1994 based on the legislation adopted. Today, six years later, it has experienced a severe financial crisis. The available resources in the system do not cover the volume provided by health care providers. The debts of the health insurance companies towards the health care providers reached SKK five billion in 1998, which is about 12.3% of the total resources available to them. One of the main reasons has been insufficient allocations of the contributions paid by the state to the health insurance system. In 1993, a decrease in the contributions to be paid by the state to a level of only 10% of the sum indicated in the Act on Health Insurance led to the first financial crisis in the system. It was adjusted by state subsidies. By the end of 1998, an overall economic downturn in the economy led to insufficient payments of the employers to the health insurance system. This was worsened by the fact that many private companies were closed without paying their debts. In addition, it has become clear that such a comprehensive system with services free-of-charge at the point of delivery is no longer sustainable within the existing resources. An open-ended system of reimbursement led to increased demand of the population on health care services of high quality. Although a lot of limitations were imposed on health care providers, the situation has not improved. Another reason for the unsustainability of the health insurance system might be caused by the introduction of plurality, in this system resulting in a rapid increase in the health insurers, following by mergers and closures. This evidently led to unnecessary high transaction costs. A lack of appropriate control and regulatory mechanisms led to a rapid increase of costs on drugs, expansion of hospitals as concerns their equipment and shift of services to the more expensive and more specialized.

During the health care reforms, the appropriate systems of reimbursements have not yet been found to motivate the health personnel to provide better quality, more efficient and cost-effective services. The salaries and incomes of the health care providers have become low. These goals of the reforms have not been met. The principle that the health care provider who provides better care and has more patients receives more money is not true at the current time. In addition, the restrictions imposed recently on primary health care providers have turned their role into a more passive one. So the goal to strengthen primary care has not been fully achieved. In addition, cooperation between the primary care and others is not ideal, even though recently the agencies for nursing home care have been recognized as a cost-effective substitution of hospital care and their number has increased rapidly.

The shift of inpatient care to outpatient care has not been accomplished either. The culture of over-hospitalization and specialist care prevail. Patients often bypass the primary health care doctors despite their gatekeeping functions.

The relationship between the health care provider and the patient has not improved. Free choice as a method of introducing competition between health care providers has become a way of pushing primary health care doctors to prescribe more and newer – and therefore more expensive – drugs.

The passive attitude of the population has changed only slightly and has not resulted in a wise and appropriate demand for health care services. A lot of programmes devoted to disease prevention and health promotion were excluded from the health insurance scheme. The most severe situation was in oral health, when the school dental services were abolished. The oral health status of the population has worsened.

In 1998, the new government in its health policy document "Transformation Steps in Health Care Provision for 1999–2002" concludes that the health care sector is in a severe crisis (*17*). The main features of this document are: growing discrepancy among resources which are allocated in accordance with the legislation on financing of health care and the range of this health care determined by the Act on Therapeutical Order; poor structure and excessive capacity in the network of health care facilities and services; inefficient use of resources; insufficient control; non-transparent, politically-driven privatization; poor drug policy; the continuing problem of lack of contributions to health insurance, particularly by state enterprises; and the inability to initiate systemic changes in health care to ensure effective use of resources and a restructuring of capacities in order to strengthen outpatient care, home nursing care, etc. The document also proposed future steps which started to be implemented in 1999. However, evaluation of these steps is a matter for the future.

Conclusions

Health care reforms in Slovakia were originally initiated by the government and have been implemented without significant adverse effects on the population. The principles of universality and equity of access have been maintained. Ministers of Health have taken the lead in all reforms with substantial support from the Government and health professionals. Slovakia managed to shift from a tax-based state monopoly financing system to a pluralistic and decentralized health insurance system – with the aim of making financial flow transparent. However, the introduction of a pluralist health insurance market has resulted in many problems. Such a system requires a great deal of financial resources and is functioning only in countries with an advanced economy. In addition, the system has been vulnerable due to a lack of appropriate regulatory and control mechanisms, and an adequate information and monitoring system.

Systems of health care services reimbursement which influence appropriate behaviour by health care providers and the population have not been introduced. The combination (partly capitation, partly fee-for-service) scheme for reimbursement proved to be financially unsustainable. Due to many restrictions on volume and range of primary health care services, the quality of care and the social standing of these physicians has not improved.

The way in which privatization of health care services was carried out in Slovakia enabled physicians in primary health care to leave the state sector and become independent contractors in a very short period of time. However, it led to the uncontrolled issuing of licenses for private practice. Equity of provision of health care has largely been maintained under the new system. The Slovak Republic inherited a comprehensive network of facilities and these remain accessible to the whole population. Equity in financing of health care has, however, been compromised to a certain extent as contributions are proportionate instead of progressive (as they would be under a tax-financed system). In addition, the ceiling on contributions means that they are, in effect, regressive.

There seem to be few incentives for efficient behaviour by hospitals or for shifting care from hospital to primary care. The reimbursement system for hospital care applied in the period 1994–1998 did not offer the right incentives for higher efficiency and cost-effective behaviour. Their effective management is hampered by a still largely bureaucratic approach of the Ministry of Health, which has been many times misused politically. A centralized hospital system has made relations with the local community difficult.

Consumer choice has not resulted in the expected outcomes. Although patients can choose their primary care doctor, the relationship between health care provider and patient has not improved. Initially, competition between providers led to increasing volumes of services, partly because of the incentives of the fee-for-service system, partly through patients taking advantage (e.g. by pushing doctors to prescribe them the newest form of drug which is often the most expensive one). These factors led to unsustainable health care bills which were countered by imposing limitations on the volume of services. This, however, led to a situation in which some health care providers had to reject and not attract patients. There were no incentives for an improved quality of care at the primary care level. At the hospital level, the bed-day system of reimbursement put certain hospital procedures at a disadvantage and led to attempts to increase length of stay. However, the latter was prevented by the introduction of limits on length of stay according to the type of ward and type of hospital. Quality of care is critically dependent on the morale of health care professionals. This has not improved as the right incentives have not been found. The training of health professionals has not improved either and suffers from many problems.

Thus the transformation process in Slovakia is not yet complete. Many problems have to be solved. While in 1995 the previous version of the Health Care Systems in Transition Profile on Slovakia concluded that Slovakia had achieved a relatively painless transition from socialist, central planning to a pluralistic, health insurance based health system (*19*), today the health sector is in severe financial and organizational difficulties. The health care reform has not resulted in improved cost-containment and cost-effectiveness. A new set of comprehensive health care reforms need to be prepared and implemented. Among the issues to be addressed are: defining the appropriate role of the Ministry of Health vis-à-vis the health insurance companies and the health care providers; finding better ways to balance positive and negative incentives in financing, resource allocation and provider reimbursement; and institutionalizing health technology assessment for pharmaceuticals as well as for health services.

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