Health Care Systems in Transition

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Foreword

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

HiTs seek to provide relevant comparative information to support policy-makers and analysts in the development of health care systems in Europe. The HiT profiles are building blocks that can be used:

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

The HiT profiles are produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides the detailed guidelines and specific questions, definitions and examples needed to compile a HiT. This guidance is intended to be flexible to allow authors to take account of their national context.

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. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) Health Data and data from the World Bank. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

The HiT profiles provide a source of descriptive information on health care systems. They can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health care systems. This series is an ongoing initiative: material is updated at regular intervals. Comments and suggestions for the further development and improvement of the HiT profiles are most welcome and can be sent to info@obs.euro.who.int. HiTs, HiT summaries and a glossary of terms used in the HiTs are available on the Observatory's website at 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 Systems and Policies. The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the governments of Belgium, Finland, Greece, Norway, Spain and Sweden, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat, and research directors Martin McKee, Elias Mossialos and Richard Saltman.

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The HiT reflects the state of reform and data in October 2004.

Introduction and historical background

Introductory overview

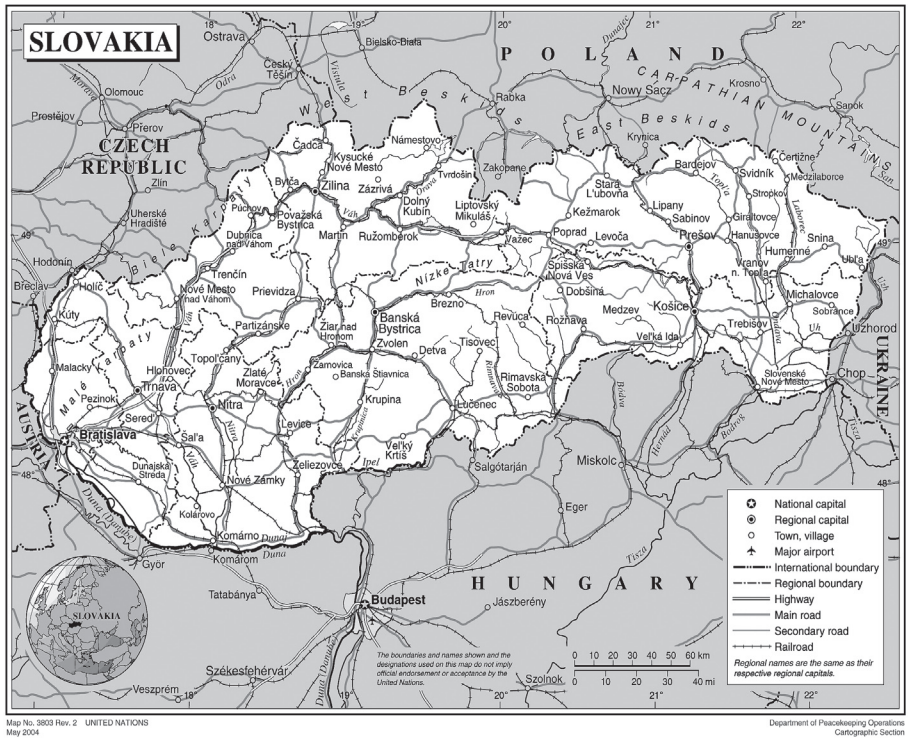
Slovakia[1] is located in the very heart of Europe, covering 49 035 km^2. It borders the Czech Republic to the west (252 km), Poland to the north (547 km), Ukraine to the east (98 km), Hungary to the south (669 km) and Austria to the south-west (106 km). It is mostly mountainous with a mixture of continental and oceanic climates characterized by four distinct seasons. The capital of the Slovak Republic is Bratislava. According to the results of the Population and Housing Census conducted in May 2001 (the first since Slovakia's foundation in 1993), Slovakia's population was 5.4 million of whom 51.4% were women *(2)*. In comparison with the previous census conducted in 1991, the Slovak population had increased by 105 000 (2%) and the percentage of women had increased even more.

Between 1991 and 2001 the number of economically active persons increased by 48 000. Though their share in the total population remained unchanged, they composed almost half of the total population (49.6%). The number of women in the economically active population increased slightly from 46.9% in 1991 to 47.7% in 2001. Slovaks accounted for 85.8%, Hungarians 9.7%, Roma 1.7%, Czechs 0.8% and others 2% *(2)*. However, according to the World Bank's 2002 report, Slovakia has one of the largest Romani populations in Europe – informal estimates suggest that there are between 420 000 and 500 000 Roma in Slovakia, or between 8% and 10% of the population *(3)*. This estimate suggests that a large proportion of the Romani population tends to report another nationality.

According to the 2001 census the share of the total population with any religious affiliation had increased from 73% to 84% since 1991. The share of

[1] Slovakia is the official term used throughout this document unless its synonym "Slovak Republic" is part of a proper name.

Fig. 1. Map of Slovakia[2]



persons reporting the Roman Catholic Church increased from 60% to 69%, Evangelical Church of the Augsburg Confession affiliation increased from 6.2% to 6.9%, Greek Catholic Church increased from 3.4% to 4.1% and the Reformed Christian Church increased from 1.6% to 2% *(2)*.

Political history and administrative structure

The Slavic tribes from which the Slovaks derive their ethnic origin settled in the area of the current Slovakia in the 5th and 6th centuries. The Great Moravian Empire (833–907) became one of the most important cultural, historical and political milestones in Slovak history. After its collapse, Slovaks became part of the Hungarian Kingdom for almost 1000 years. In 1918 after the breakdown of the Austro-Hungarian monarchy, Slovaks and Czechs created the Czechoslovak

[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 Systems and Policies 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.

Republic. In 1939 the first Slovak Republic was created under the pressure of the German nationalsocialist regime.

In 1945 the Czechoslovak Republic was restored. The communists' assumption of power in February 1948 affected Slovakia's development for more than 40 years. The 1968 invasion by Warsaw Pact troops ended efforts to reform the totalitarian communist regime. The Czechoslovak Socialist Republic's change into the Czech and Slovak Federal Republics in 1968 and the following period of normalization had symbolic rather than practical significance for Slovakia.

The velvet revolution in November 1989 led to the fall of the communist regime. Political, economic and social reforms towards a democratic market-oriented economy in the Czech and Slovak Federal Republic were accompanied by Slovak efforts to gain more political and economic autonomy in their part of the Federal Republic. In September 1992 the Constitution of the Slovak Republic was adopted by the Parliament of the Czech and Slovak Federal Republic. From January 1993 the Czech and Slovak Federal Republic was divided constitutionally into two independent successor countries.

Since that time Slovakia has been an independent state: a republic with a multi-party parliamentary democracy and a social market economy. The National Council of the Slovak Republic, the parliament at national level, has a single chamber of 150 members. The current President of the Slovak Republic was elected in the 2004 direct presidential election for a period of five years. The President appoints and dismisses the Prime Minister and other members of the Government. The President can return for repeated consideration the legislation accepted by the parliament but if this is passed through parliament a second time it is adopted automatically.

The present Government of Slovakia has four Vice-Prime Ministers, three of whom are also Ministers of Finance, Economy and Justice respectively; and eleven other ministers. It represents a coalition of four parties in the parliament. Since the 2002 election seven parties have been represented in the parliament, four support the coalition Government and three form the opposition. However, the structure of the political party system continues to develop.

Since 1996 Slovakia has been divided administratively into 8 regions and 79 districts. In 1999 the Government adopted a new public administration reform strategy aimed at strengthening a dual-element public administration system consisting of state and territorial administration. The state administration currently operates at regional level. The heads of the regional offices that correspond territorially with the self-governing higher territorial units are appointed directly by the Government.

Following adoption of Act No. 302/2001 on self-governing regions, the territorial administration operates on two different levels. At local level municipalities act as self-governing bodies – this system was reinstated immediately after the collapse of the communist regime in 1989. The mayors and members of municipal councils are elected directly in local elections for four-year periods. At regional level there are eight higher territorial units, with borders identical to those of the eight administrative regions. The higher territorial units established by the 2001 Act are represented by their chairmen and local parliaments, both elected directly for four years. The functions of the territorial administration have been expanded in recent years and now they perform most functions connected with the daily lives of the citizens.

Socioeconomic development[3]

In 1991 the 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 rather dynamically during the period 1993–1998 with an average annual increase of 5% in GDP and an inflation rate that decreased from 25.6% in 1993 to 5.6% in 1998. Nevertheless, the foundations of this economic development proved to be unsound, especially from 1996 to 1998, and unsustainable.

As noted in the previous version of the Health Care Systems in Transition Profile on Slovakia *(2)*, in 1998 the economic situation worsened and by the end of that year the growth in GDP was only 0.1%. Final domestic demand fell by nearly 10% between 1998 and 2000. Meanwhile, core inflation – which excludes administered prices and indirect taxes – slowed slightly and the current account deficit was halved to less than 4% of GDP. A significant positive contribution from external demand enabled Slovakia to avoid a recession, however, with output growing by 2% annually in 1999 and 2000. In December 2000 this period of sluggish economic growth was followed by Slovakia's accession to the Organisation for Economic Co-Operation and Development (OECD).

The Government's stabilization policies and progress in structural reforms laid the foundation for economic recovery in 2001 and led to Slovakia's

[3] This section is based on the OECD Economic Survey: Slovak Republic (2002); Reform of the Pensions System in the Slovak Republic published by the Ministry of Labour, Social Affairs and Family (2003); Development of the Slovak Economy under the Government of Mikulas Dzurinda published by the Vice-Prime Minister for Economy (2002); Monitoring Report on the Slovak Republic's Progress in its Preparation for EU Membership: September 2002–May 2003; and data from the Human Development Report 2004.

sovereign credit rating being upgraded to investment grade. Output growth accelerated to 3.25%, fuelled by improved profitability and inflows of foreign direct investment. A rebound in real wages sparked a turnabout in private consumption. By contrast, a slowdown in world trade, following the 11 September 2001 events in the United States of America, reduced the volume of Slovak exports and contributed to a widening of the current account deficit to almost 9% of GDP in 2001. The overall pace of growth was insufficient to create an adequate number of jobs for the expanding labour force. Thus the unemployment rate continued to rise, exceeding 19% in 2001, and core inflation fell to a record low of 3.2% at the end of the same year.

Notwithstanding the weak performance of the global economy, Slovakia's 2002 economic growth reached 4.4% – its highest level since 1997 and the highest growth rate in the central European region. In 2002 the private sector's share in GDP generation increased to 88.9% from 82.4% in 1998, the average inflation rate was 3.3%. The dynamic development of import-intensive domestic demand, coupled with low economic growth in European Union (EU) countries, was reflected in the persistently high current account deficit in 2002. This increased from SKK 84.4 billion[4] in 2001 to SKK 87.9 billion in 2002. However, as a percentage of GDP the current account deficit fell from 8.5% in 2001 to 8.2% in 2002.

The Slovak economy continued to grow in the first quarter of 2003. According to preliminary estimates, GDP grew by 4.1% in comparison with the same period in the preceding year (9.6% at current prices) and its growth rate was 0.2% higher than in the first quarter of 2002. The private sector generated approximately 87.3% of the growth (same share as in the first quarter of 2002) in a similar input-output structure to that in 2002. On the other hand, consumer prices increased considerably from the beginning of 2003 and the average inflation rate was 7.6%.

According to the World Bank's Slovak Republic Development Policy Review *(3)*, Slovakia's external current account and fiscal deficits (net of privatization receipts) are unsustainably high, despite some recent declines. Therefore, while much policy attention has focused on stimulating investment, future growth also will depend on improving the employment rate and initiating longer- term efforts to reform major spending programmes including social protection and health.

Since the early 1990s, real GDP has shown a continuous increase that was – except for stagnation between 1998 and 2000 – also reflected in international purchasing power parities (PPP) (Table 1). In 2002, Slovakia's GDP was about

[4] Billion is defined as a thousand million (10^9) throughout this document.

SKK 1096 billion (€25.3 billion). Per capita, purchasing power adjusted (PPP) GDP accounted for US $12 256, which was well above the EU-10 average, but still just about half of the OECD average.[5]

Unemployment fell from 14.4% in 1993 to 11.6% in 1997, but then increased to 17.8% (Table 1). In 2003 the unemployment rate was 17.1% compared to the EU-25 average of 9.1% as documented by Eurostat. In the social protection sector the transformation has been aimed at moving from a paternalistic social

Table 1. Macroeconomic indicators, 1992–2002

Indicator	1992	1995	1996	1997	1998	1999	2000	2001	2002
GDP at current prices (billion SKK)	349.9	576.5	638.4	712.7	781.4	844.1	934.1	100.9	109.6
GDP per capita in US $ PPP	6 703	8 114	8 821	9 303	9 802	10 008	10 680	11 371	12 256
Annual inflation (CPI) (%)	10.0	9.9	5.8	6.1	6.7	10.6	12.0	6.5	3.4
Rate of registered unemployment (%)	11.4	13.8	12.6	12.9	13.7	17.3	18.3	18.3	17.8
Public social expenditure (% GDP)	–	13.0	13.0	12.7	13.1	13.5	–	–	–
– on old age pensions (% GDP)	–	4.9	5.0	4.9	5.0	5.1	–	–	–
– on unemployment (% GDP)	–	0.3	0.4	0.5	0.6	0.8	–	–	–

Source: OECD Health Data, 2004.

Note: GDP: gross domestic product; billion: one thousand million; CPI: consumer price index. SKK: Slovak koruna=€0.02.

state policy based on a comprehensive social security scheme to systems of social insurance, state social support and social assistance. In 1993 the National Insurance Agency was established to cover social, sickness (i.e. sick pay) and health insurance systems. In 1995 the health insurance system was separated from social and sickness insurances. From 1996 both social and sickness insurance were administered by the Social Insurance Agency and a voluntary complementary pension insurance scheme was introduced. In 1998 a new Act on Social Assistance limited substantially state benefits and the number of eligible recipients.

The current social protection system in Slovakia provides several forms of benefits. However, the public social protection system maintains its dominant

[5] In the following text the term EU-10 average is used for the ten new member states of the European Union after 1 May 2004; EU-15 average is used for member states prior to 1 May 2004, and EU-25 average is used for all member states after 1 May 2004.

position while the existing supplementary pension schemes have a rather symbolic importance in terms of their pay-outs. This broadly defined mandatory pay-as-you-go system, managed by the public Social Insurance Agency through its Social Security Trust Fund, covers different forms of pension benefits paid out to more than 1.4 million people. The system includes old-age pensions, proportional old-age pensions, disability pensions, partial disability benefits, widows' pension benefits, solo income source benefits, spouses' pensions, social pensions, increased benefits for immobility and several others. The total expenditures of this system stand at about 8% of the country's GDP. For Slovakia a more complex definition of the social protection system could include other forms of private voluntary pension schemes such as life insurance, investments in mutual funds, bank savings, or holding of other forms of assets. However, the only scheme that could be recognized as an institutionalized form of voluntary pension scheme is a network of supplementary pension insurers with combined assets of 0.6% of GDP.

The severe difficulties of sustaining this system are rooted in the ageing population, rising mobility and migration of the country's workforce, high unemployment rates and a lack of incentives to encourage people to become economically active. The social protection reform adopted in 2003 is designed to build up a modern system of social protection based on three pillars representing, first, an important mandatory old-age pension saving system combined, second, with the public pillar, which is supposed to provide the basic pension benefits financed from the state budget rather than contributions from the economically active population. Third,the new system of social protection is enhanced through tax-deductible voluntary saving/insurance schemes supported by the state.

The United Nations Human Development Index recorded the Slovak Republic's gradual growth from 0.80 in 1990 to 0.81 in 1997 and 0.84 in 2002 when Slovakia ranked 42 worldwide.[6] This increase in the Human Development Index value has resulted mainly from continuing real GDP growth, from US $7681 in purchasing power parities (PPP) per capita in 1993 to US $PPP12 840 per capita in 2002. The adult literacy rate, maintained at 99% for many years, reached 99.7% in 2002. Nonetheless, while the previous version of the Health Care Systems in Transition Profile on Slovakia *(1)* concluded that Slovakia ranked third among central and eastern European countries according to the Human Development Index 1999 (data for 1997), the country ranked only sixth in the Human Development Index 2004 (data for 2002) behind Slovenia, the Czech Republic, Poland, Hungary and Lithuania.

[6] As a result of revisions to data and methodology and varying country coverage, the values and ranks in the 2004 UN Human Development Report are not strictly comparable with those in earlier UN Human Development Reports.

Demographic trends and health status

The main demographic characteristics in Slovakia are low rates of birth, fertility and population growth. Slovakia's population is ageing (Table 2). In comparison with 1991, the number of persons of pre-productive age declined by 298 000 and reached 1 015 million in 2001 – their share in the total population declining by 6% to 18.9%. The number of persons of productive age increased by 303 000 (5.3%) and reached 3349 million persons (63.1%) in 2001, of whom 48% were women. The post-productive age population increased by 0.7% to 967 000 in 2001 and the proportion of women was 66.1% *(4)*. In consequence, the average age of the population extended to 36.3 years and the ageing index (defined as the population aged 65+ compared to the children aged 0–14) reached a value of 98.5 in 2001, well above the current European average of 73.

Table 2. Age structure of the population (%), 1961–2001

Census data	Permanently resident population in the age group[a]		
	0–14	15–65	66+
1961	31.5	54.8	13.7
1970	27.2	56.3	16.5
1980	26.1	57.5	16.4
1991	24.9	57.8	17.3
2001	18.9	63.1	18.0

Source: Statistical Office of the Slovak Republic.

Note: [a] including persons of unknown age.

Between 1989 and 2003 the population grew from 5.3 to 5.4 million, mainly due to a decrease in mortality. At the same time the negative trend of the birth rate continued. The number of live births decreased from 15.3 per 1000 inhabitants in 1989 to 9.5 in 2002, when it ranked above the EU-10 average (9.2) but below the EU-15 average (10.6, data for 2001) *(5)*. In 2001 there were only three regions (Zilinsky, Presovsky and Kosicky) where the number of live births exceeded the number of deceased *(6)*. The total fertility rate (children born per woman of childbearing years) of 2.1 in 1989 decreased to 1.2 in 2002 when it ranked below the averages of both the EU-10 (1.3) and the EU-15 average (1.5). For each 1000 live births in 2002 there were 435 abortions compared to 697 in 1989 *(5)*.

From 1987 there was a transient increase in the crude death rate. This decreased continuously from 10.3 per 1000 population in 1991 to 9.7 per 1000 population in 2002. Over the same period life expectancy at birth increased

continuously from 71.1 years to 73.9. In 2002 the life expectancy of men was 69.8 years and of women 77.6 *(5)*; a substantial improvement in a relatively short time. During the 1990s Slovaks had a higher life expectancy than the populations of most other EU-accession countries *(5,7)*. Yet growth slowed and ranked below the EU-10 average from 2000 onwards. In 2002 life expectancy at birth was 73.9 years compared to the EU-10 average (74.2) and EU-15 average (79.0, 2001). Similarly, age-standardized mortality (971 per 100 000 inhabitants) ranked below the EU-10 average (927) in 2002 and was substantially lower than the EU-15 average of 642 (data for 2001) *(5)*. It is important to note that male life expectancy in Slovakia varies by as much as five to six years between districts *(6)*. High levels of environmental pollution seem not to be correlated with the regional differences in life expectancy in Slovakia *(7)*.

The most numerous causes of death continue to be diseases of the circulatory system, which account for more than half of all deaths (54.5% in 2002). Similarly, cancer remains a major health problem causing 22% of all deaths. Although mortality from ischaemic heart disease ranked well above the EU-10 average, cancer-related causes of death were similar. Infant mortality decreased from 10.9 per 1000 live births in 1991 to 7.6 in 2002 and ranked above the EU-10 average *(5)*.

Noncommunicable diseases that are partly related to unhealthy lifestyles such as sedentary habits, unhealthy diet, smoking and bad stress management, still represent the major health problem in Slovakia. Slovakia is one of the countries with the lowest number of newly registered AIDS cases (0.04 per 100 000 inhabitants in 2002) compared to the EU-10 (0.32) and EU-15 averages (2.39). Newly registered tuberculosis cases (18.1 per 100 000) were substantially fewer than the EU-10 average (27.2) but higher than the EU-15 average (10.8) in 2002 *(5)*. Overall, communicable diseases currently are well under control in Slovakia and the immunization rate has been maintained at high levels (95%–99%) for many years (see Fig. 8).

Historical background

The early developments

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

developed further. Sickness insurance became mandatory for wider groups of the population in accordance with Act No. 221/1924. However, this was restricted to employees in privileged services and in certain high-risk occupations (e.g. miners) rather than others such as peasants or the unemployed. The sickness insurance scheme included reimbursement of curative medical services only but various insurance funds offered different contribution terms and services for different groups. Some funds, mostly profession-oriented, owned their own health care facilities.

An additional system of private health care providers, mostly family doctors, provided their services for direct payments. In parallel the system of public health services was built up to combat infectious diseases and other public health problems but did not receive appropriate political and financial support. Generally the quality of medical services and their accessibility were dependent on ability to pay. Act No. 221/1926 widened the social insurance system to include disability and pension benefits.

From 1948 to 1968

Radical changes occurred in the health system after 1948. All health care facilities were nationalized and placed under the ownership of the state, Act No. 99/1948 on national insurance unified all types of insurance, e.g. sickness, disability and pension. This began the health system's transformation into a Soviet-type system. Following Act No. 103/1951 on Unified Curative and Preventive Care, outpatient and inpatient services were integrated into hospitals with polyclinics. Based on Soviet experience, Act No. 4/1952 on Hygienic and Anti-epidemic Care led to the establishment of hygiene stations and research institutes and introduced doctor-hygienists. It was a priority to improve health statistics and health education services. A system of chief experts from important medical specialties was introduced to advise the Ministry of Health. These new elements were developed further and some survive to this day, as shown later. The new system of health care covered over 95% of the population *(8)*.

During the 1950s there was significant success in controlling infectious diseases, particularly tuberculosis. 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 and the state assumed responsibility for financing and managing the provision of health care. All health services, in cluding drugs and medical aids, became free of charge for all citizens. There was further unification of the organization and structure of the health system. Health care facilities, hygiene stations and other health institutions were integrated into the hierarchical structure of the

regional, district and local national institutes of health. This represented vertical and horizontal integration of all health services.

At a local level, health centres consisted of a team of health professionals: a "territorial" physician and a nurse for adults, a paediatrician and a nurse for children (aged up to 15), 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. These teams served a population of 3200 to 3800 residents who were assigned to their primary health care physicians according to domicile. These health centres worked with hospitals with type I polyclinics to form a local institute of national health, providing basic health services to a population of 30 000 to 50 000. Type I hospitals had four departments: internal medicine, paediatrics, gynaecology and surgery. Other services were provided by hospitals with polyclinics of the higher type II. Together with three to four local institutes of national health, a district hygiene station and other specialized health institutions, these formed the district institutes of national health and provided comprehensive health services for a population of 150 000 to 200 000.

Three regional institutes of national health completed the hierarchical organization of integrated health care provision. Type III hospitals provided highly specialized services for a larger population: 1 to 1.5 million inhabitants. This also included teaching hospitals *(9)*. State-allocated financial resources were paid, according to the plan for the development of the national economy, to the national institutes of health through the district and regional national committees. This was the only source of income for the health care facilities.

From 1968 to 1989

In 1968 the Ministry of Health of the Slovak Socialist Republic was established, following the adoption of the federal organization of Czechoslovakia. Its task was to ensure the unified provision of health care services. The basic principles of socialist health care were: state responsibility for, and ownership of, the health care system and care for health of the whole society; unity of science and practice; planning; a unified system for the provision of health care services; focus on prevention; universal coverage and free of charge access to services; and citizens' active participation in health protection. Yet the scarce resources allocated to the health sector were insufficient to cover all the needs of health care providers. According to the literature, the state allocated 5% of its budget to the health sector but lack of transparency in this allocation resulted in a general lack of necessary capital investments, obsolete equipment and facilities, drug shortages, low salaries for health personnel and inequitable development of health services.

The socialist health system's indicators of success were the numbers of graduated physicians and nurses as well as hospital beds, hence the widespread construction of hospitals observed from the 1960s. This resulted in a relative oversupply of health personnel, dominance of hospital care and prevalence of so-called specialist culture. Patients tended to be hospitalized extremely often for routine conditions and became passive objects of the health care services. In contrast to the state's commitment to preventive care, this underuse of primary health care providers lowered health personnel's social status and reduced morale and caused overall low prestige of th e health sector. In addition, state paternalism encouraged the population to hold passive attitudes 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 the health status of the population. For example, the gap in life expectancy between Slovakia and the western European countries has increased since the mid 1960s, mainly due to noncommunicable diseases. Radical political, social and economic changes triggered throughout Czechoslovakia in November 1989 also brought about reforms in the health sector. After 1989, there were slow but sure differences in the development of the health systems in the Czech and Slovak Republics.

Organizational structure and management

The Constitution of the Slovak Republic lays down the basis for the organization, management and financing of the country's health care system. It ensures universal coverage and access to free of charge health care services based on mandatory health insurance, built on the principles of solidarity and plurality. In addition the constitution provides everybody with the right to protection of their health. This constitutional guarantee of "free health care" has created a very strong sense of entitlement and a strong resistance to health insurance and/or health care provision schemes that differentiate or explicitly ration access to health services.

Not surprisingly Slovakia, like many other formerly communist states of central and eastern Europe, has struggled to devise and implement a coherent strategy for transforming its health sector into an effective provider of health services given the resources available. There has been a mixed experience in the last decade, health outcomes improved during several health reform efforts in the 1990s but serious problems have emerged in the financing and provision of health services. The impact on health care provision is discussed below.

Organizational structure of the health care system

The organizational structure of the health care system has changed radically since the communist era. During the 1990s the integrated health care system was stepwise replaced by a social health insurance system with multiple funds. The integrated purchaser-provider function of public administrations with a three-tier hierarchical organizational structure at local, district and regional level was abolished. Most providers of primary health care and many specialists providing secondary care went into private practice. Thus health care delivery became

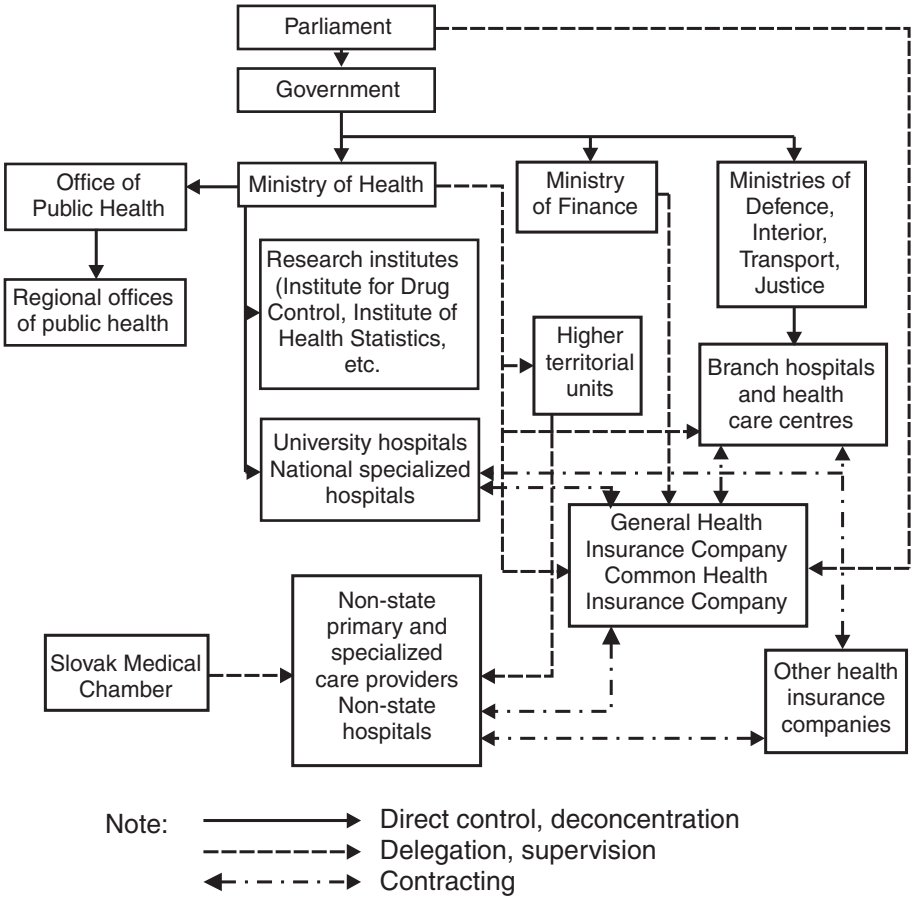
fragmented, based on separated health care providers operating mostly alone. Also, the links between primary health care providers and secondary health care weakened. Until 2001 all but three hospitals continued to be owned and operated by the Ministry of Health and their employees remained civil servants. There were few strong administrative imperatives to manage these facilities effectively and efficiently. Indeed, no hospitals were closed or liquidated for debts and no directors sacked for financial mismanagement, neither were there any significant reductions in staffing levels. In other words, Slovakia's health sector still was shaped by many of the same forces as before 1990 and the devolution of some health service responsibilities to the newly established self-governing regions in 2001 was no panacea.

Thus, although Slovakia had achieved a relatively painless transition from socialist central planning to a pluralistic health insurance-based health care system, the grim reality was that a variety of financial and organizational difficulties remained *(7)*. After the 2002 elections this resulted in the government declaring its objective to increase the health care system's responsiveness to population needs, having regard to the finance available. The Government intends to increase the efficiency of the use of finance allocated for health care, mainly in the mandatory health insurance and, as a priority, to ensure the protection of individuals particularly in the provision of expensive health care services that realistically cannot be covered by an individual *(10)*. The current organization of the health care system builds upon a mixture of decentralized and centralized structures.

Ministry of Health

Despite the intention to transform the Ministry of Health into a body focusing mainly on its regulation functions, its status has changed rather slowly over the last decade. As the main state executive body responsible for health care and health protection, the Ministry of Health proposes the principal directions and priorities of 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 the regulation of health care providers to ensure that everyone has equitable access to health care services. It issued licences for all non-state health care providers until this was delegated to the regional state physicians in 1996. Since January 2002 (based on Act No. 416/2001 on Transfer of Competences from state administration to self-governing regions and municipalities) a major part of the Ministry of Health's powers to issue licences to health care providers has been decentralized to local territorial administration – self-governing regions (higher territorial units).

Fig. 2. Organizational chart of the health care system, 2004



Moreover in 2003 the process of decentralization continued. Legislation enabled the regions to participate more fully in the ownership of health care establishments and for health care facilities to have equal opportunities and obligations without restrictions on the type of ownership. The Ministry of Health controls the health insurance companies, including issuing or withdrawing permits to operate. Since 1999 the Ministry of Health has been responsible for maintaining the Central Registry of Insured Persons that had been maintained by the General Health Insurance Company. The National Assembly passed a law in October 2004 which introduces an Office for the Supervision of Healthcare to strengthen institutional control over health insurance companies. The Office shall focus on the content and range of health care services purchased within the framework of the "solidarity package" (basic benefit package), as well as

control of health care establishments' provision of state-of-the-art health care financed from the resources of health insurance companies. It will be established already in November 2004 in order to be operating when the other reforms of the comprehensive reform package come into force in January 2005. In addition, the government will authorize the Financial Market Authority to oversee the solvency of the health insurance companies and introduce the obligation for all health care establishments with a turnover exceeding a specified amount to pass independent financial audits. This will lead to better transparency of financial flows in the health system.

Until recently the Ministry of Health owned, ran and controlled almost all inpatient health care facilities and held the authority to issue guidelines on their construction, appoint and dismiss their directors and approve the use of expensive medical technology and equipment. Since January 2003 only a relatively small number of outpatient specialists, major regional and teaching hospitals and some specialized inpatient care providers have remained under state ownership with centralized management.

In 2003 the management of 44 hospitals was transferred to the regions. Of these, 16 hospitals with type I polyclinics were transferred to the municipalities and 28 hospitals with type II polyclinics were transferred to the higher territorial units. Following adoption of the "Transformation" Act No. 13/2002, another 14 hospitals became non-profit organizations. Until 2004 the Ministry of Health also took responsibility for capital investments in the health care facilities owned by the state. This activity has practically stopped and the health care providers have to cover their investments from their own sources.

The Ministry of Health also bears responsibility for the postgraduate, continuing and secondary education of health personnel, as well as for the recognition of diplomas and certificates for professional qualifications obtained abroad. However, while the previous HiT on Slovakia *(1)* noted that the Ministry of Health owned and operated the secondary nursing schools, these schools are now under the management of the self-governing regions. On 1 September 2002 the former Slovak Postgraduate Academy of Medicine was transformed into the Slovak Healthcare University (*Slovenska zdravotnicka univerzita*).

Through the State Office of Public Health of the Slovak Republic, the Ministry of Health ensures surveillance and control of communicable diseases; food safety; safe and healthy working and living conditions; and other public health functions regulated by the Act on Health Protection. Most surveillance and control activities are carried out by 36 regional offices of public health following a devolution process in 2004 (see *Public Health*). Through the Inspectorate of Spas and Springs, part of the Ministry of Health, measures are being adopted to protect and make effective use of natural curative spas,

springs and mineral water. Finally, the Ministry of Health directly manages some other health care institutions such as the Slovak Medical Library, Institute of Health Information and Statistics and the State Institute for Drug Control. The directors of these institutions are directly appointed by, and responsible to, the Ministry of Health.

Other ministries

Currently, the Ministry of Health cooperates closely with the Ministry of Finance to carry out state control of health insurance companies. However, the new legislation submitted to parliament in early 2004 shifts control of health insurance companies' performance from these ministries to the Financial Market Authority and the newly established Office for the Supervision of Healthcare. In a similar vein, from January 2004 the power to issue pricing decrees related to health services, drugs and medical devices, among others, was transferred from the Ministry of Finance to the Ministry of Health in order to combine the process of drug pricing and categorization (i.e. the process of setting up price coverage by the mandatory health insurance), while applying the provisions of Directive No. 89/105/EEC for the categorization of medicines to be included in the solidarity package.

Both Ministries continue to plan and execute state expenditures on health care. The Ministries of Defence, the Interior, Justice, and Transport still own and manage directly their own health care facilities. They are represented on the board of directors of the state-guaranteed Common Health Insurance Company that covers mainly the employees, and their families, employed within the sectors covered by these ministries.

Local health administration

In 1991 sub-district and district state physicians (medical officers) were introduced to strengthen the control and planning functions of the Ministry of Health. Sub-district physicians were responsible for the level of professional skills of health workers and for 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 radical changes in the administrative and territorial division of Slovakia replaced sub-district and district physicians with 79 district state physicians and 8 regional state physicians. They were granted the powers to issue licences for outpatient non-state health care providers. In addition, the regional offices became the owners of the state-independent polyclinics and health centres. During the 1990s

the regional and district state physicians controlled the operation of non-state health care providers.

However, Act No. 416/2001 transferred several authorities and responsibilities from the state administration to the self-governing territorial administration – municipalities and higher territorial units. Thus, since January 2002, the municipalities have:

- established outpatient centres, including first-aid centres and outpatient departments in social care facilities;
- established specialized outpatient facilities, polyclinics, type I hospitals and hospitals with type I polyclinics;
- established home care agencies;
- participated in health prevention programmes;
- approved daily working hours in non-state health care facilities.

The higher territorial units' autonomy in health service organization and management is strengthened even more, for they:

- establish polyclinics and hospitals with type II polyclinics;
- maintain the register of health care facilities;
- issue licences for the provision of health care in several types of non-state health care establishments (e.g. home care agencies; polyclinics, hospitals with types I and II polyclinics, psychiatric hospitals, etc.);
- hear appeals against the decisions of health facility managers;
- ensure health care coverage among health care establishments;
- establish and operate secondary nursing schools;
- participate in health prevention programmes.

On 1 January 2004 the state district offices were closed and the posts of state district physicians and pharmacists abolished. Their competences were passed to the physicians and pharmacists in higher territorial units. The functions of the former state regional and district hygienists were transferred completely to the 36 public health offices that provide specialized state administration for public health. To ensure adequate performance of all tasks in the territory of a given region, the posts of "higher territorial unit physician" and "higher territorial unit pharmacist" have been established to supervise the provision of health care and the delivery of pharmaceutical care respectively. The competences of municipalities and higher territorial units were specified further in the subsequent Acts No. 118/2002 and 138/2003 (see *Public health services*).

In the legislation submitted to parliament in 2004, a major part of the present competences of the physicians and pharmacists of the higher territorial units has been passed to the Office for the Supervision of Healthcare.

Health care providers[7]

The existing infrastructure of health care providers was established during the communist regime with a heavy emphasis on inpatient care, over-reliance on specialist physicians and focus on quantity rather than quality of care. Despite the numerous changes in society and the economy in the 1990s, the health service delivery system has remained virtually untouched. As the World Bank noted in 2001, even the introduction of multiple insurance companies had not produced the desired client-orientation and service focus, and most of the actors continued to follow the roles and patterns that were prevalent in the previous system *(7)*.

Until 2001 the Ministry of Health owned all but three hospitals and many outpatient specialist facilities. Since then, ownership and the managerial competencies of most hospitals and outpatient clinics for secondary care has been devolved to self-governing municipalities and higher territorial units at regional level. Other polyclinics and hospitals, often the better maintained, were sold to private providers or transformed into not-for-profit entities with public benefit status.

At the end of 2002, the network of all providers consisted of 11 864 health care establishments – of which there were 9058 outpatient facilities, 66 polyclinics, 141 home care agencies, 28 dialysis centres, 92 hospitals (including 9 teaching, 6 psychiatric), 21 special health institutes, 114 medical devices' supply points and 1044 pharmacies. Virtually all pharmacies and spas were privately owned. Among 6520 facilities for primary care approximately 7% (477) of primary outpatient care facilities were state-owned, 93% were owned privately. In contrast, out of the total number of specialized outpatient care facilities, 3309 were in public ownership (51%), whereas 3179 were private (49 %) (see *Primary and secondary outpatient care)*.

Health insurance companies

In 1995 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 Act No. 98/1995 on the Treatment Code that specifies the basic benefit package. They all administer the mandatory health insurance scheme and are not allowed to carry out other activities. The health insurance companies receive their

[7] This part is based on the data provided by the General Health Insurance Company to the Ministry of Health.

revenues from various sources, the most important being insurance contributions that include contributions paid by income-earners and by the Government on behalf of the exempt population.

The number of health insurance companies reached thirteen in 1996 but declined to five in 2004. In Slovakia the role of multiple insurance companies is unclear as there is no real competition between them and the public has accrued no clearly identifiable benefits from the presence of multiple insurers. Differentiation of the value of membership in different organizations has been unclear and variation most evident only in the area of insurer debts *(7)*. The operations of the General Health Insurance Company, the largest company, and the Common Health Insurance Company are guaranteed by the state and they are required to submit their annual budgets to parliament for approval. The latter was created in 1998 by the merger of the Military Health Insurance Company, Railway Health Insurance Company and the Health Insurance Company of the Ministry of the Interior. Private founders established the three other health insurance companies. Voluntary health insurance currently plays only a marginal role in the Slovak health care system; used mostly to insure against health care costs that may arise during stays abroad that are not reimbursed largely in the framework of the basic benefit package.

In October 2004 a reform was passed by the parliament which introduces two types of health insurance. The first is a mandatory public health insurance scheme founded on the principle of solidarity and provided by health insurance companies on the basis of a permit issued by the Office for Supervision in Healthcare, with prudent control of solvency. It will be used to finance a basic benefit package, the solidarity package, which will include the financing of the emergency network. The other is a voluntary health insurance scheme to cover out-of pocket payments for health care provided outside the framework of the solidarity package. Insurance houses will provide this complementary scheme on the basis of permits granted by the Financial Market Authority. According to the proposed legislation, profit-making joint stock insurance companies shall provide both types of health insurance. The Government will ensure equal opportunities and obligations for health insurance companies in both the mandatory and voluntary health insurance schemes.

Professional organizations

In 1992 the Act on the Slovak Medical Chamber paved the way for the establishment of the first statutory professional organization in Slovakia, 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-Graduate Health Workers. Currently, membership of the relevant chamber is obligatory for all physicians, nurses, midwives, pharmacists and dentists. Chambers have the responsibility to ensure that their members meet professional standards. They are involved in carrying out inspection and control of both state and private health care facilities, developing mandatory legal regulations and a performance-related pay scheme. Chambers also participate in the appointment process (by selection procedure) of leading positions in health care facilities and in the process of continual education for their members.

The competences of chambers were changed considerably in the Act on Health Care Providers, Health Care Workers and Professional Organizations in Health Care passed by the parliament in 2004. The major changes concern the voluntary membership of professionals who provide health care as employees, the issuing of permits to health providers and a strengthened role in procuring the continuous education of health care workers that is expected to contribute to increased protection of patients.

In addition, the Slovak Medical Association is active in organizing professional conferences, meetings and workshops. Membership is voluntary and its operation subsidized by the Ministry of Health.

Voluntary organizations

Separate laws regulate health care provision by civil associations, such as the Slovak Red Cross and other nongovernmental organizations. The Slovak Red Cross is involved mainly in training people in first aid provision, but also is responsible for recruiting blood donors, the 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 the provision of social assistance to the homeless and refugees. Furthermore, several nongovernmental organizations operate in the health sector in Slovakia, concentrating on the protection of patients' rights and organized mostly on the basis of a specific disease or group of diseases.

Planning, regulation and management

The Ministry of Health remains the main body committed to plan, regulate and manage health care provision although no specific national health plans were produced following the rejection of socialist centralized planning. The

direction of the development of the health sector usually was laid out in the political documents called the Policy Statement of the Government of the Slovak Republic. The last was approved in November 2002. This document defines the goals and priorities of the government, including health care, for four years. During the 1990s the appropriate ministries elaborated the policy statements into more detailed and time-scheduled action plans.

The state budget provides a basis for annual financial planning for health care expenditures from taxes. These expenditures include resources to fund 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 state contributions to the health insurance system. The Act on State Budget also regulates the value of the state's per capita contribution. The General Health Insurance Company and the Common Health Insurance Company must submit their annual budgets to the parliament for approval. Following the transfer of some Ministry of Health and local state administration functions to the municipalities and higher territorial units in 2002, part of the budgeting and planning functions became the responsibility of these self-governing local authorities. The following Acts currently regulate the health care system.

- 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 Treatment Code (Slovak version is *Zakon oliecebnom poriadku*; some authors translate it as the Act on Medical Rules or Basic Benefit Order Act, the previous HiT used the term: Act on Therapeutic Order; the Government's most recent policy statement uses the term: Treatment Code).
- Act No. 140/1998 on Drugs and Medical Devices, which was adopted in 1998 and completed the set of acts regulating health care at the time.
- Act No. 416/2001 on Transfer of Some Competences from the State Administration Authorities to Municipalities and Higher Territorial Units (sometimes called the Act on Competences).
- Act No. 13/2002 on the Conditions of Transformation of Some Budgetary Organizations and Contributory Organizations into Non-Profit Organizations Providing Public-Benefit Services (the Act on Transformation).
- Act No. 216/2002 on the Occupation of Pharmacist, Slovak Chamber of Pharmacists.

- Act No. 219/2002 on the Occupation of Physician, Slovak Medical Chamber, on the Occupation of Dentist, Slovak Chamber of Dentists.
- Act No. 311/2002 on the Occupations of Nurses and Midwives and the Slovak Chamber of Nurses and Midwives.
- Act No. 596/2002 on Health Protection of People.

Regulating mandatory social health insurance

Act No. 273/1994 on Health Insurance introduced a mandatory health insurance scheme based on the principles of solidarity, no profit and plurality. At the beginning it established relatively mild criteria for the establishment of a health insurance company and resulted in a rapid increase in the number of health insurance companies – 13 by 1996. Such a situation proved to be unsustainable and in 1995 the Act was amended to introduce tighter criteria for the establishment, and particularly the operation, of health insurance companies. This resulted in mergers of some health insurance companies and closures of others. The companies that closed left a debt in the health insurance system that remains to this day. Now, only five health insurance companies administer the mandatory health insurance scheme.

The Act on Health Insurance also failed to regulate adequately the reporting obligations of the health insurance companies and lost the link between the state health information system and those of the health insurance companies. Two other regulations, the Decrees on Redistribution Mechanism and on Specific Accounting, addressed a possible adverse selection of insured persons. Since the reallocation principle emphasized solidarity, health insurance companies with a high proportion of salaried employed and insured persons and a high success in contribution collection effectively supplied resources to the health system, while those with a high number of insured who were not salaried and/or a low contribution collection rate drew resources from the system. Moreover, as the structure of the insured had a significant impact on the financial health of an insurance company, some companies "accommodated" the structure of their insured according to the different redistribution mechanisms in force in different years. The primary incentive of such efforts was to achieve a balance between revenues after reallocation and expenses per insured person.

This resulted in the phenomenon of health insurance tourism, the mass recruitment of the insured by competing health insurance companies. Following considerable discrepancies in statements of the number of insured for the purposes of reallocation, a new regulation of risk-structure compensation was introduced in 1999. Under this regulation, 100% of the contributions collected from economically active persons and government-based contributions were

redistributed according to the risk indices of health care provision costs founded on the age structure and gender of the insured. Since October 2002, 85% of the contributions have been redistributed. The Ministry of Health issues risk indices annually; the latest for 2004 was published in December 2003 (see *Health care financing and expenditure*). In general, although the introduction of this measure improved the application of the solidarity principle, it failed to address the essential issue of the future scope of the benefit catalogue covered by solidaric financing. In early 2004 the Ministry of Health submitted a bill on health insurance that seeks to introduce the difference between mandatory public health insurance and voluntary individual health insurance. The amended bill was approved by the National Assembly in October 2004 following. Public health insurance based on the solidarity principle will cover health care provision and related services as well as the urgent health services specified in the solidarity package of the Act on Health Care Covered from Public Health Insurance. However, those insured who fail to pay contributions for three months in a calendar year will be entitled to urgent care only. This would not apply to an employee for whom the employer has failed to pay contributions. Similarly, those who have failed to enrol, or have not been enrolled on their behalf, in the health insurance scheme should be covered for the provision of urgent health services only. The health insurance company with the largest number of insured would reimburse the costs of such services. Most importantly, however, for the first instance the Ministry of Health would reimburse the health insurance company for the costs of provision of these services, but all following cases of urgent care provision should be paid by the one who failed to fulfil the obligation of enrolment. Individual health insurance has to cover the scope of services specified in an individual health insurance contract.

Regulating health care providers and patient rights

Act No. 277/1994 on Health Care and its amendments regulate the rights and obligations of both health care providers and patients and other general conditions for health care provision. The Ministry of Health issues regulations based on this Act, concerning details on the provision of primary, secondary and tertiary care; minimum standards for personnel and technical equipment in different types of health care facilities; the form and process of postgraduate training and education of health personnel. It also regulates the network of health care facilities that may work on a contractual basis with the health insurance companies. The Ministry of Health's first directive on the network of health care facilities was issued in November 1997 but abolished as it was

legally ambiguous. In January 1999 the Ministry of Health limited the issue of permissions that enable health care providers to contract with the health insurance companies.

The Ministry of Health approved the document entitled Optimum Network of Health Care Facilities in the Slovak Republic in August 2001. This has helped to stabilize the number of health care providers, ensure a more even geographical distribution and provide the basis for restructuring inpatient care provision by closing some hospitals and large numbers of acute care beds. Several amendments to the Act on Health Care were adopted during the reforms, one of the most relevant (adopted in 2002) specified the reporting obligations of all health care providers. Many of the emerging non-state health care providers had neglected these obligations in the early 1990s because of insufficient regulation. This affected the system of health statistics for several years as some data on health care resources, their utilization and costs for 1992 to 1996, are not available. Consequently, the planning and regulatory functions of the Ministry of Health were weakened substantially during this period.

However, probably the most important amendment to the Act on Health Care is that of April 2003 (Act No. 138/2003). This was a significant milestone in health care provision in Slovakia as it made an explicit split between health care provision and its related services. For inpatient care these services include food and hotel services as well as data processing during health care delivery. For outpatient care the services cover data processing. For pharmaceutical care 'provision-related services' applies to data processing as well as the act of supplying drugs or medical devices to patients. Non-emergency transport of patients is defined as a provision-related service, not health care provision per se. This split into two categories had important implications. As formal, though marginal, patient co-payments were introduced for provision-related services they began to alter citizens' perception of the constitutional guarantee of free of charge health care provision. Citizens were made aware that not everything provided in the process of health care is provision per se and therefore is not required to be delivered free of charge, especially where resources are limited.

The most recent amendment to the Act on Health Care was adopted in September 2003. This represents another significant move towards the EU *acquis communitaire* in the fields of mutual recognition of health care qualifications and free access to the Slovak health care job market for the citizens of EU Member States, and vice versa, according to the limitations specified in the accession treaty (the transition periods are different for each member state).

Regulating benefits and cost-sharing

Act No. 98/1995 on the Treatment Code defines the scope of health care services covered by the health insurance scheme as well as the extent of patients' payments. It also sets out the system for reimbursing health care providers for their services. The Act originally comprised four large appendices that functioned as authorized positive lists: of Drugs, of Medical Devices, the Indication List for Spa Care and the List of Health Care Procedures. The last distinguished between outpatient procedures and procedures complementary to medical interventions, giving each a certain number of points that served as the basis for reimbursement of this type of care. The current provisions of the Act exclude very few procedures (e.g. cosmetic surgery, acupuncture, non-acute health care provided abroad) from reimbursement through the mandatory health insurance but do specify co-payments for certain drugs and medical devices. Generally the Act has not provided a basis adequate for the regulation of health care delivery, as a basic regulatory tool it has not contained the costs of health care. In particular, the List of Drugs has caused many problems that resulted in several amendments.

For these reasons the Treatment Code is due to be replaced by a new Act on the Scope of Health Care Services Reimbursed from the Public Health Insurance from January 2005. This proposes a diagnosis-related reimbursement scheme divided into two basic categories: a list of priority diseases that presents diagnostic entities that should be fully reimbursed from public health insurance and, a list of diagnoses reimbursed from the public health insurance scheme that presents diagnostic entities that should be reimbursed fully or partially (with patient co-payment). A categorization committee will determine the amount and scope of reimbursement in the latter category. The committee will consist of representatives from the health insurance companies, Ministry of Health and professionals. Nonetheless, the fully reimbursed list excludes several services that are fully reimbursed currently (for example, most of the dental care services).

Regulating drugs and medical devices

The Act on Drugs and Medical Devices regulates the conditions for dealing with medical products, testing and registration of drugs, the approval process for medical devices and the tasks of state administration concerning human pharmaceuticals. The amendments to this Act in 2001 and 2003 specified more clearly some formulations about drugs, medical devices, implants and methods for assessing their side effects. Also they defined more precisely the process

of registration, manufacture and clinical testing of drugs and medical devices (see *Pharmaceuticals and health technology assessment*).

Regulating competences of state and private institutions

In 2001 adoption of the Act on Competences represented an important step in health care transformation as it determined the ownership and management of health care facilities devolved to self-governing municipalities and higher territorial units. In general the Act envisioned that both primary and specialized outpatient facilities, as well as small hospitals (mostly with four basic clinical wards) would be passed on to the municipalities, whereas medium-sized hospitals (usually comprising up to nine clinical wards) would be transferred to the higher territorial units by 1 January 2003. Alternatively, these facilities could be sold directly or transformed into not-for-profit public-benefit organizations in accordance with the Act on Transformation (see below). For outpatient facilities the Ministry of Health prepared several privatization waves that resulted in 81 health care facilities being approved for privatization in August 2002.

Regardless of this, by the summer of 2002 the main difficulty stemmed from the facilities' accumulated debts, which the Government should have settled by the end of May 2002. Not only did the debts remain but also these health care facilities continued to accumulate arrears that were not addressed by the provisions of the Act. In response to this, in 2003 the Ministry of Health established "Creditor", a state incorporated company designed to clear the debts of hospitals and health insurance companies. Most of the debts of the transferred and transformed hospitals have been settled.

The sale of some facilities before the mass transfer to local administration often led to the municipalities and regions receiving sub-standard rather than functional property *(11)*. The new owners of health care facilities, the municipalities and higher territorial units, have become more proactive recently: by starting to dismiss the old hospital managers, conduct comprehensive economic audits of hospital performance and implement measures to balance the budgets. In many transferred hospitals debt accumulation slowed during 2003 but has not stopped completely.

The Act on Transformation that regulated the transformation of some budgetary and contributory organizations into non-profit organizations providing public-benefit services was adopted in 2002. This Act approached denationalization from a different perspective from previous legislation in this area. In addition to forms of privatization such as direct sale and transfer of ownership to municipalities or higher territorial units, it introduced the concepts

of priority and non-priority property. The state provides priority property to non-profit organizations for use for the given purpose only, non-priority property is transferred to the ownership of the not-for-profit organization. This allowed health professionals to achieve higher autonomy and flexibility in managing their own organizations. During 2002 and 2003 14 hospitals were transformed into not-for-profit organizations and, from the first data provided in early 2004, it seems that they achieved the best results in balancing hospital budgets. Therefore in early 2004 three other state-owned health care facilities were transformed into not-for-profit organizations and another two were proposed.

Regulating health personnel

The Acts on Health Occupations, adopted in 2002, regulate the professional requirements for practising as a pharmacist, physician, dentist, nurse and midwife. Act No. 216/2002 on the Occupation of Pharmacist specified the Registry of Pharmacists and its conditions of enrolment. The addendum to this Act comprises the Pharmacists' Code of Ethics. Act No. 219/2002 on the Occupations of Physician and Dentist regulates professional and ethical standards of performance and covers the status, powers and duties of the Slovak Medical Chamber and the Slovak Chamber of Dentists. The addenda to this act include the Physicians' and Dentists' Codes of Ethics. Similarly, Act No. 311/2002 regulates professional and ethical principles for practising nurses and midwives and deals with the status of the Slovak Chamber of Nurses and Midwives. The addenda to this Act comprise the Codes of Ethics for both nurses and midwives.

Regulating health protection

Until recently the powers and obligations of state administration authorities, municipalities, natural and legal persons, as well as the performance of state health surveillance in the field of health protection were regulated by Act No. 272/1994 on Health Protection. In 2001 the Act was amended to include details of complex protection against radiation, in compliance with EU requirements. Owing to several other amendments, the complete provision was reissued in 2002 as Act No. 596/2002.

Decentralization of the health care system

Among the key strategic objectives of the health care reforms in Slovakia were reduction of the state monopoly and decentralization of health care delivery. While the state monopoly has been reduced by the massive privatization of health care providers, particularly primary health care physicians and pharmacies in the mid 1990s, the process of decentralization went nowhere until the beginning of the new millennium. During the reform process, it became obvious that the abolition of the national health institutes resulted in an undesirable centralization of health care facilities' management functions at ministerial level. Although considered to be a transition stage enabling later privatization, centralized management of inpatient facilities prevailed until recently. The reasons were twofold. First, initially the municipalities rejected responsibility for the hospitals due to a fear that they would be unable to manage, finance and sustain them. Second, the Government was reluctant to allow the privatization of inpatient health care facilities.

As a consequence, 161 health care facilities (practically all hospitals, polyclinics and specialized therapeutic institutes) and 69 more control and reference institutions (such as the State Institute for Drug Control, National Health Promotion Centre and Institute for Health Information and Statistics) remained under the direct management of the Ministry of Health for decision-making and regulation in 2000. Inevitably hospitals had very little discretionary power over their own resources, the minister appointed the hospital directors thereby guaranteeing dependence and full control. The idea of a hospital governing board comprising representatives of the health insurance companies, state administration, municipalities, patients, private sector and others, was not practised. In short, it was an inefficient system of management since the Ministry of Health could not possibly oversee the day-to-day operation of more than 90 hospitals. Also this operational burden obstructed its more important strategic role as regulator and policy-maker *(7)*.

However, there had been progress for polyclinics and local health centres providing outpatient care. Responsibility for these centres was devolved to the regional offices of the state administration or to the municipalities and some of the Ministry of Health's administrative tasks were passed to district and regional state physicians. This was decentralization by deconcentration. Regional state physicians were authorized to issue licences to private outpatient care practices. They were responsible for the organization of outpatient health care provision in their territories and involved in the analysis and development of the provider network. In addition, insurance contribution rates, health service prices and

the health services benefit package were strictly and uniformly regulated by the Government, although the financing of health care provision had been delegated fully to health insurance companies since 1994 (with direct contractual relationships between the insurance company and the single provider). In 2001 there was a major step in decentralization; further regulative and decision-making powers were devolved to local self-governments – municipalities and higher territorial units – including the competency to issue licences to health care providers (see *Planning, regulation and management*).

Government Resolution No. 94 in February 1993 approved the privatization of a list of pharmacies and other state contributory organizations providing pharmaceutical care. Accordingly the sale of 148 pharmacies was approved in 1993 and another 424 gained approval for privatization during 1994. By the end of 1995 all pharmacies were privately owned. In the effort to stimulate privatization and reduce state control of primary health care services, non-state providers received preferential financing during 1993 and 1994. This led to a substantial growth in the number of providers in primary health care. By the end of 1994 a total of 2124 licences for non-state primary outpatient care providers (general practitioners for both adults and children, stomatologists and gynaecologists) had been issued; by the end of February 1995 this reached 3190. However, this did not yield fully desirable results: the quality of health care delivered by non-state providers compared unfavourably with those under state ownership. Thus, in August 1995 the health care transformation strategy developed by the Ministry of Health focused on forming a network of health care providers comprising both state and private, with equal status and financing.

In addition the government refreshed the strategy of health care privatization. According to this, solo primary outpatient departments and local primary care health centres should have become mostly non-state, whereas secondary outpatient departments, polyclinics and hospitals should have been non-state at local levels only. The state ownership of district, regional and teaching facilities should have been preserved. By mid-May 1995, the ownership of local primary care health centres was transferred to 172 municipalities. By the end of December 2002 in primary outpatient care, 90% of general practitioners for adults, 96% of general practitioners for children and adolescents, 92% of gynaecologists and 95% of stomatologists were private providers. However, only 49% of specialized outpatient care providers were private and only 3% in inpatient care. Conversely, 983 out of 1044 outpatient pharmacies were private but only 3 out of 61 hospital pharmacies.

In June 2001 Government Resolution No. 577 approved the second phase of privatization for health care facilities. This included 36 local health centres,

13 sanatoria, 2 rehabilitation institutes for children, 1 long-term care facility, 27 hospital pharmacies, 49 polyclinics, 1 natural spa treatment centre and 7 specialized therapeutic institutes. Government Resolution No. 101 in February 2002 added another 3 polyclinics and 1 long-term care facility. Finally, 6 more local health centres, 9 sanatoria, 1 rehabilitation institute for children, 3 long-term care facilities and 20 more polyclinics were included by Government Resolution No. 274 in March 2002.

In January 2003 the legislation transferring the ownership of several health care facilities from the Ministry of Health to higher territorial units and municipalities came into effect. This applied to the majority of the previously mentioned health care establishments determined either for privatization or transformation into not-for-profit organizations. Owing to the legal contradiction that only the possessions of the state (not self-governing regions or municipalities) can be privatized or transformed, it was impossible to privatize and transform any health care facilities whose transfers were unfinished at the end of 2002. New legislation on the ownership of higher territorial units and municipalities was adopted in late 2003. This gave them more competencies to manage their health care institutions and in early 2004 the management of some institutions owned by higher territorial units was transferred to private institutions on a contractual basis.

Health care financing and expenditure

A mix of public and private sources funds health care in Slovakia. Public expenditure on health includes spending from the national budget and contributions to the statutory health insurance (Table 3, Table 4). In 2002 health insurance contributions were the most important source of funding, accounting for over 85.9% of the total expenditures on health *(4,6)*. This includes the state's budgetary transfers on behalf of economically inactive persons that represented 36.6% of the total health expenditure in 2002 *(13)*.

Slovakia has three forms of private expenditure on health:

1. Formal (or authorized by law) payments for services provided by private physicians and facilities; co-payments for drugs, some dental services, visual aids, medical devices; and since June 2003, marginal co-payments for provision-related services such as data processing, food, transport and hotel services.
2. Informal (or unauthorized) payments for health services made to providers who are not authorized by law to receive such monies.
3. Insurance premium payments for voluntary health insurance offered on a contractual basis. While formal out-of-pocket payments represented 10.9% of total health expenditure in 2002, no data are available on the extent of informal payments (also not included in total expenditures). Currently voluntary insurance premiums are negligible *(14)*.

External donors represent an other source of finance, which is accounted separately in national and international figures. National health accounts are based on expenditure figures and do not show revenues, annual debts or the accumulated arrears of the health care system (see *Main source of finance*).

Table 3. Main sources of financing in million SKK, 1996–2002

Source of financing	1996	1997	1998	1999	2000	2001	2002
Total health expenditure[a]	42 939	48 181	46 959	48 724	51 648	56 185	62 420
Public	40 488	44 693	43 155	43 678	46 166	50 166	55 594
– Taxes	14 594	15 087	11 493	2 522	2 590	2 479	1 995
– Compulsory health insurance	25 894	29 606	31 714	41 156	43 576	47 687	53 599
Private	2 451	3 488	3 752	5 046	5 482	6 019	6 826
– Out-of-pocket[b]	2 451	3 488	3 752	5 046	5 482	6 019	6 826
– Private insurance	0	0	0	0	0	0	0
Other	–	–	–	–	–	–	–
External sources	832	699	653	1 082	1 071	988	461

Source: Statistical Office of the Slovak Republic, 1999–2002 data of the Statistical Office of the Slovak Republic recalculated by the Institute for Health Information and Statistics according the OECD method for the OECD.

Note: [a] figures do not include external sources; [b] figures for 1999–2002 include (negligible) expenditures from nongovermnental organizations.

Main source of financing

Historically the system of financing in Slovakia's territory was constructed as a Bismarck type, based on the social insurance covering accident and sickness insurances. In 1948 this system changed with the introduction of national insurance that unified all types of insurance i.e. sickness, disability and pension. This insurance system was replaced by general taxation in 1966 when all health services became free of charge for all citizens and the state assumed responsibility for financing and managing health care provision. In the years that followed 5% of the state budget was allocated to the health sector although there was substantial lack of transparency in the resource allocation. In the early 1990s general taxation implemented through the annual budgets was replaced by the mandatory health insurance system. This transformation was accomplished within two years.

Health finance reform began with the establishment of the Institute for the Introduction of Health Insurance in 1992. Its efforts led to the establishment of a national insurance agency to finance health care, sickness and pensions (based on Acts No. 7/1993 on Establishment of the National Insurance Agency and on Financing of Health Insurance, Sickness Insurance and Pension Insurance; and 9/1993 on Health Insurance and Management of the Health Insurance Fund). This created the first legal basis for the operation of the Health Insurance Plan,

Table 4. Main sources (%) of financing, 1996–2002

	1996	1997	1998	1999	2000	2001	2002
Public sources	94.3	92.8	92.0	89.6	89.4	89.3	89.1
– Taxes	34.0	31.3	24.5	5.2	5.0	4.4	3.2
– Mandatory health insurance	60.3	61.4	67.5	84.5	84.4	84.9	85.9
Private sources = Out-of-pocket[a]	5.7	7.2	8.0	10.4	10.6	10.7	10.9

Source: Statistical Office of the Slovak Republic, 1999–2002 data of the Statistical Office of the Slovak Republic recalculated by the Institute for Health Information and Statistics according the OECD method for the OECD.

Note: [a] include negligible nongovernmental organizations' expenditures from 1990–2002; private health insurance sources are negligible.

including rules for provider reimbursement. The National Insurance Agency with its three separate health, sickness and pension insurance funds continued to be funded through the state budget. In January 1994 the financing of the National Insurance Company was separated from the state budget and the company became independent. However, the financial flows between the health, sickness and pension insurance funds proved to be incompatible with adequate allocations to health funding. This resulted in a proposal to separate the Health Insurance Plan from the sickness and pension schemes and two independent institutions were established – the National Social Insurance House and the General Health Insurance Company.

Health insurance companies and their coverage

On 1 January 1995 Act No. 273/1994 on Health Insurance paved the way for the establishment of multiple health insurance companies. At the same time, a redistribution mechanism among the various health insurance companies was introduced to compensate for differences in the risk structure among the insured of different health insurers. Also, the Act on Health Insurance strengthened the legal requirements for establishing and running a health insurance company and obliged each new health insurance company to obtain approval from the Ministry of Health. These approvals were conditional upon a company enrolling at least 300 000 persons within the first year of its existence and holding a minimum of SKK 30 million at its disposal in a Slovak bank as well as a precautionary

reserve of at least SKK 10 million. Each applicant was to submit proposals of estimated revenues and expenditures and a contribution collection plan to the Ministry of Health.

Initially the number of health insurance companies administering the mandatory health insurance increased from 10 in 1995 to 13 in 1996. Yet, as expected, the implementation of these legal requirements has led to a reduction in the number of health insurance companies over the years. Some merged, while others were closed (Table 5). Insured persons from the companies that closed were passed to the General Health Insurance Company. However, the debts to the health care providers have not been paid yet and their complete settlement is expected by the end of 2004.

Today, there are five health insurance companies in Slovakia. The General Health Insurance Company operates through branches throughout the country and covers the biggest part of the population. While its coverage decreased from approximately 97% of the population in 1995 to barely 50% in 1997 *(15)*, it increased again mainly due to the takeover of the insurance company Perspektiva. In recent years, however, the distribution of the insured among the health insurance companies has remained almost unchanged (Table 5).

The Common Health Insurance Company was formed in July 1998 by the merger of 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. This is the second largest insurer and covers mainly the employees of these sectors and their family members. The state guarantees the solvency of the General Health Insurance Company and the Common Health Insurance Company, which could be described as statutory institutions. The other three health insurance companies (Apollo, VZP Dovera and Sideria-Istota) are private: their solvency is not guaranteed by the state.

Table 5. The market share (%) of social health insurance companies, 2000–2002

Health insurance company	2000	2001	2002
General Health Insurance Company	66.5	66.7	65.2
Common Health Insurance Company	12.7	12.7	12.9
Apollo	8.1	7.9	8.5
Sideria	6.9	6.9	7.2
VZP-Dovera	5.8	5.8	6.2
Total	100.0	100.0	100.0

Source: Ministry of Health of the Slovak Republic.

All health insurance companies operate throughout Slovakia and are obliged by law to accept all eligible persons that apply for membership.

The General Health Insurance Company 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 employers' representatives and five state representatives, all of whom must 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 the quality and quantity of health care provision, the health insurance company employs inspection doctors (peer-reviewers).

The revenues of the General Health Insurance Company are drawn from insurance contributions, the state budget (contributions on behalf of the exempt population and a subsidy to cover rises in health service costs), various sanction fees (fines), income from property, gifts and other incomes. The General Health Insurance Company submits an annual year-end account to the parliament and a draft annual budget for the forthcoming year. Its insurance budget consists of four funds: the basic, reserve, purpose and administrative funds. The basic fund is 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 the above-standard health services *(16)*.

The reserve fund is 0.5% of all contributions and is designed 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, consisting of 2% of all contributions as well as gifts and earmarked state allocations, is to be spent on reimbursing increased costs related to the health care provision 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 funds and organizational structures.

Contributions

Each of the five health insurance companies currently operating in Slovakia's health insurance market collects its own contributions and reports them to a special branch of the state-run General Health Insurance Company for consolidation and reallocation. The insurance contribution is calculated at the rate of 14% of the assessed income of the individual. The employer pays 10% of basic income, for the contribution calculation this is defined as the tax-relevant income from the previous month for each employee. The employee pays 4%

of basic income. Employers of disabled persons contribute only 2.6% of their assessed income, the rest is made up by the state. Self-employed individuals pay 14% of their assessed income, which is defined as 50% of their income on which tax was paid in the previous year. Prior to 2001, contributions were set at 13.7% of the minimum wage or assessed income; the insured individual paid 3.7% and the employer paid the remaining 10% (Table 6).

The minimum income liable to contributions is SKK 3000 per month and there is an upper limit on an individual's income from which the contributions are paid. In November 2003, for example, this was set at SKK 32 000 (€778) per month. This means that the system has a regressive component, as the wealthiest pay a smaller proportion of their income than the majority of the population.

The rest of the country's residents are covered via payments from the national government (Table 6). The Government pays premiums as lump sums to the respective health insurance company on behalf of dependent children and their carers. In contrast to most social health insurance systems, non-working family members currently are not co-insured by the contributing family member. In addition, the Government transfers lump sums to health insurance companies on behalf of pensioners, job applicants not receiving any allowance, persons receiving disability benefits, and reservists. Contributions from persons receiving sick pay are financed by the Social Insurance Company. Parliament

Table 6. The state's contributions on behalf of the non-contributing population (in % of the minimum wage or assessed income), 1994–2003

Year	State contribution		
	Contribution rate	Contribution basis	Amount per year
1994	13.7%	of 10% of the minimum wage	SKK 2 450
1995	13.7%	of 54% of the minimum wage	SKK 2 450
1996	13.7%	of 80% of the 1995 minimum wage	SKK 2 450
1997	13.7%	of 80% of the 1995 minimum wage	SKK 2 450
1998	13.7%	of 73% of the assessed income	SKK 2 700
1999	13.7%	of 76.5% of the assessed income	SKK 2 700
2000	13.7%	of 76.5% of the assessed income	SKK 2 700
2001	14.0%	of 76.5% of the assessed income	SKK 2 400
2002	14.0%	of 76.5% of the assessed income	SKK 2 750
2003	14.0%	of 76.5% of the assessed income	SKK 2 890

Source: Ministry of Health of the Slovak Republic.

Note: Minimum wage: SKK 4400 per person per month in 2000, SKK 4920 in 2001, SKK 5570 in 2002, and SKK 6080 in 2003 (the government regulations No. 298/2000, No. 411/2001, No. 514/2002 and No. 400/2003).

defines the state's contribution for economically inactive persons as part of the Act on the State Budget. Table 6 shows that the state contribution rates were set lower than the contribution rates for economically active persons.

Pooling and risk adjustment

Implementation of the multiple health insurance companies scheme in Slovakia has raised problems from the very beginning. To counter adverse selection the insurance funds are obliged to contract with every resident who applies and individual health providers are prohibited from influencing the choice of insurance company. However, as insured persons are allowed to change fund at any time, the insurance companies (not respecting the law) motivated some individual health providers to influence residents to change health insurance funds. This aimed to increase the number of economically active and healthy persons in their funds but the adverse selection was noticed because of the unequal proportions of economically active and inactive persons among these health insurance companies.

To emphasize solidarity a reallocation mechanism was adopted in 1995 in order to ensure the availability of adequate and equitable funding by redistributing funds collected by the different insurers. The risk pooling mechanism requires that a legally defined percentage of the total amount of contributions collected is reported to an administrator of a special mandatory health insurance account. The administrator reallocates the collected amount in accordance with the mechanism established and regulated by law.

At the beginning of 1995, 60% of the collected contributions were pooled into a special account and redistributed among the insurers. A coefficient of 3 was applied to each insured person aged over 60 for this reallocation. Since then the share of income to be pooled and the risk adjustment mechanism have been changed several times. Since October 2002, 85% of a health insurance company's income is pooled and the redistribution adjusts for gender and 17 age groups (Table 7). The coefficient value was rather arbitrarily assigned to guide the allocation process as there was no account of the relative costs of medical expenditures for different age groups.

The adjustment of income and expenditure leads to a redistribution of revenues among health insurance funds. While health insurance companies with a large proportion of economically active persons and/or insured with a low index of risk criteria were supplying resources, health insurance companies with a large share of economically inactive persons and/or insured with a high risk index (mainly children under 3 and retired persons over 60) received resources from the "pool".

In practice, this mechanism caused many problems as some health insurance companies accommodated the structure of their insured to the different reallocation mechanisms in force in different years. The primary incentive of such efforts was to achieve a balance between revenues after reallocation and expenses per insured. This resulted in health insurance companies competing to recruit members, a phenomenon called health insurance tourism. Table 8 shows that membership of the various health insurance companies changed especially in the first years following the introduction of multiple health insurance companies and the risk adjustment scheme. In response, in July 1999 a new mechanism for the risk-structure compensation was introduced and 100% of collected contributions were redistributed according to the age and gender of the insured. However, as this benefited the health insurance companies with disadvantageous insured portfolios, in September 2002 the amount of funds to be redistributed was changed to 85% (Table 7).

Table 8 also shows the number of "dead souls" (over-)reported by the health insurance companies. The Central Registry of Insured Persons had been introduced to monitor shifts in membership and to increase transparency and accountability. At first, the General Health Insurance Company was asked to administer this registry. However, due to many complaints the Ministry of Health took over responsibility for the Central Registry in 1999.

The allocation of contributions raises questions of equity as well as appropriateness of the use of resources. First, the state contribution does not cover fully the health care costs of children and the elderly. These are higher than the health costs for adults of working age. Thus employed persons without children subsidize the costs of medical care for families with children and non-working spouses. Similarly, payments for pensioners are strongly subsidized by working persons *(7)*. Second, the governance and administration of the special redistribution process is unbalanced. For example, in 2001 and 2002, the Common Health Insurance Company stopped paying into the pooling account which at that time was administered by the General Health Insurance Company, thus generating a debt of more than SKK 2 billion. The Common Health Insurance Company justified this decision by referring to the debts of the state-owned Railways Company that were due to unpaid contributions and amounted to SKK 1.3 billion. The situation encouraged the Ministry of Health to suggest a General Health Insurance Company takeover of the Common Health Insurance Company but this was abandoned in late 2003.

Nonetheless, although the risk-pooling legislation has been reassessed several times, unsolved issues remain concerning both revenues and expenditures of the health insurance system. For revenues these include

- the state's low payments on behalf of the uninsured resulting in the requirement to apply to solidarity principle to the state as a payer (the state pays health insurance contributions on behalf of about 60% of all insured);
- the high number of persons failing to pay their contributions which required an increased share of solidaric financing by paying members for non-paying members; ;
- and an incompletely developed health insurance system still missing the element of non-mandatory insurance.

For expenditures the issues to be solved include the absence of efficient regulatory measures; health insurance companies' lack of competences to use regulatory measures; and the discrepancy between the costs of health care and their coverage by health insurance incomes *(17)*.

The introduction of multiple health insurance companies was based on the suppositions that plurality would be the basis for sound competition among health insurers, direct health insurance companies to make efficient use of resources for their insured and help to develop supplementary health insurance within a short time.

Over the years, however, no clear role has emerged for the multiple insurance companies in Slovakia. Despite the health insurance tourism phenomenon, there has been none of the envisaged competition among insurers. The public has accrued no clearly identifiable benefits from the presence of multiple health insurance companies. Despite the significant role that health insurance companies were expected to play in health care financing, in the past decade the SlovakGovernment has not provided insurers with many meaningful powers in budgeting, purchasing and provider payment. In fact, they have none of the more typical powers associated with an insurance function, including: risk analysis, identification and quantification; claims processing and monitoring of costs and revenues; reserves; solvency criteria; or the requirement to pay off outstanding balances by deductions from profits. Furthermore, the companies' solvency is neither subject to government supervision nor verified by an independent auditing, monitoring or supervisory authority *(18)*.

In some cases the absence of clear definitions of the scope of governmentally guaranteed benefits made it difficult for insurers to define legitimate claims. As a result the health insurance companies behaved like collection agencies only, with few or no actuarial functions (3). In order to correct these deficiencies and gain new funding for the system, in 2002 the new government committed itself to realize a comprehensive organizational reform: to introduce a real contractual structure between healthcare establishments and health insurance companies,

equal opportunities and competition between health care establishments, and an elastic network of providers for which the minimum scope would be defined and controlled by the state. The Ministry of Health submitted the corresponding legislation to parliament in April 2004. Although controversial the draft acts were passed in October 2004. They include the transformation of health insurance companies into profit-making entities that will provide a universal mandatory basic benefit package complemented by voluntary insurance offered by profit-making insurance houses (see *Health care reforms*).

Table 7. Changes in criteria for redistributing the income of health insurance companies, 1993–2003

Period	% of income to be reallocated	Adjustment for age	Adjustment for gender
1993–1994	–	–	–
1995	60	2 age groups, coefficient of 3.0 for insureds aged 60+	No
1996	80	2 age groups, coefficient of 3.0 for insureds aged 60+	No
1997	75	2 age groups, coefficient of 2.5 for insureds aged 60+	No
Aug. 1997–May 1998	70	17 age groups	No
June 1998–June 1999	65	17 age groups	No
July 1999–Sept. 2002	100	17 age groups	Yes
Since October 2002	85	17 age groups	Yes

Source: Kovac, E. (2003).

Debts

Debts exist along a chain of actors in health care *(14,17,19,20)*. For a long time and a variety of reasons the contribution collection process resulted in low collection compliance *(19)*. First, while each insurance company had to establish its own collection procedures, there was little incentive to pursue those who defaulted as, until October 2002, all revenues had to be delivered to the General Health Insurance Company for redistribution. Second, in times of fiscal stress the insurance companies are unlikely to have the resources to track down defaulting employers. Third, employees have little incentive to ensure that contributions are made on their behalf since, by law, they cannot be denied a health insurance card or health care delivery. Fourth, when approving the bills on the state budget the parliament frequently amended the state share of contributions (Table 6), consequently the state transfers on behalf of the uninsured were irregular and incomplete.

Table 8. Health insurance coverage of the population (in thousand registered persons) by health insurance company, 1995–2002

	1995	1996	1997	1998	1999	2000	2001	2002
General Health Insurance Company	4 418	2 816	2 752	3 295	3 531	3 688	3 685	3 581
Common Health Insurance Company	0	0	0	693	704	703	701	709
Apollo	192	597	520	484	456	446	438	458
Sideria	0	0	0	461	394	386	380	391
VZP-Dovera	0	0	18	400	342	326	321	333
Closed	759	1 966	2 341	280	0	0	0	0
Number of insureds in total	5 369	5 379	5 631	5 613	5 427	5 549	5 525	5 472
Population in total	5 368	5 379	5 388	5 393	5 396	5 402	5 380	5 379
Surplus of reported – insureds[a]	1	0	243	220	31	137	145	93

Source: for 1995–1999: Zajac & Pažitný, 2002; for 2000–2002: Statistical Office of the Slovak Republic, 2003.

As a result, inter-sectoral arrears and the health sector external debt mounted rapidly. Health insurance contributors are in arrears to the health insurance companies, with the state-owned enterprises being the worst offenders. In turn the health care providers have accumulated arrears to external suppliers so that firms are reluctant to contract for supplies. The health insurance companies have legal proceedings against about 10 000 contributors; though it is not clear which of these proceedings are active initiatives by the insurance companies and which are simply staking claims along with other litigants. It is also unclear which of the outstanding debts are collectable *(20)*.

The health sector's total debt including interest, rose steadily from SKK 15.2 billion at the end of 1998 to SKK 26.6 billion at the end of 2002 *(19, 20)* (Table 9). By the end of 2003 the Ministry of Health estimated that the total debt had reached SKK 32.6 billion but some estimate the total arrears to be even higher *(17)*.

Total debts include external and internal debts. Internal debts are bilateral debts between health insurance companies (not paying providers for contracted or delivered care) and health care providers (not paying health insurance contributions for their employees) that could be paired. External debts express individual health sector entities' indebtedness to external creditors and refer mainly to inpatient facilities' debts to their suppliers and the arrears accumulated by health insurance companies towards the state budget, pharmacies and other health care providers (Table 9). Thus, external debts (excluding interest rates) represent the minimum amount needed for the settlement of the health care

sector obligations. By the end of 2003 the Ministry of Health estimated that external debts had reached SKK 17 billion, accounting for about one quarter of expenditures spent on health in 2003.

Health care benefits and rationing

Health care benefits in Slovakia remain very comprehensive. The basis for determining the health care benefits covered by health insurance is laid down in Article 40 of the Constitution of Slovakia that reads as follows: "Everyone shall have the right to protection of his or her health. The citizens shall have the right to free of charge health care and medical devices for disabilities on the basis of health insurance under the conditions to be specified by a law". This constitutional guarantee, which the population generally understood as "the right to free of charge health care", formed the basis of people's expectations for the level of health services they expect the health insurance system to finance and the health system to provide.

The provisions of the Act on the Treatment Code (Act No. 98/1995) that specifies the basic benefit package set only minor limits to the nature and extent of services covered by the health insurance scheme and established patient co-payments for certain services in cases where there is no health need e.g. acupuncture, sterilization, abortion, cosmetic surgery, experimental treatment and psychoanalysis.

Table 9. Structure of the external debt of the health sector (in billion SKK), 2000–2002

Creditors	2000[a]	2001[b]	2002
Pharmacies in receivables from HIC	4.0	5.9	7.0
Public finances in receivables from HIC	4.0	4.4	2.2
Primary and secondary care providers in receivables from HIC	0.8	1.3	1.3
Drug suppliers in receivables from inpatient care facilities	3.8	3.9	4.5
Energy suppliers in receivables from inpatient care facilities	1.5	2.0	2.9
Public finances in receivables from inpatient care facilities	4.6	3.1	4.1
Other creditors in receivables from inpatient care facilities	2.7	3.5	4.6
Total amount in receivables	21.4	24.1	26.6

Source: Zajac & Pažitný, 2001 *(19)*; Ministry of Health, 2003 *(20)*.

Note: [a] as of 30 June 2000; [b] as of 30 June 2001; HIC: health insurance companies.

Drugs have been divided into three categories since 1995. The first category (very comprehensive in 1995) of essential drugs is covered fully by the health insurance. The second category (mostly patented equivalents and generics of first category drugs) are partially reimbursed (reference pricing). Those in the third category are mainly vitamins and minerals and are paid out-of-pocket (see *Pharmaceuticals and health technology assessment*). In summary, the scope of guaranteed health care benefits is very wide, as reflected by the low share of total expenditure (10%) that out-of-pocket payments accounted for between 1998 and 2002 (see *Out-of-pocket payments*).

After major disputes in the parliament, the first substantial change in health care benefits' policy came in June 2003 with the amendment to the Act on Health Care Delivery (see *Planning, regulation and management*) that made a clear distinction between the health care services and products themselves and provision-related services such as hotel services and food provided in the hospitals, non-emergency patient transport, data collection for drug dispensing and in outpatient care, etc. Patient co-payments were introduced for these provision-related services. Together with patients' increased contributions to drug costs, introduced in the new drug categorization in 2003, this has brought about higher private involvement in health care financing.

The Act on the Scope of Health Care Reimbursed by Public Health Insurance, passed by the National Assembly in October 2004 restricts further the range of benefits covered fully by the mandatory social health insurance (*solidarity package*). Other services shall be financed partly by social health insurance and partly by co-payments for which voluntary schemes of complementary health insurance shall be made available (see *Health care reforms*).

Complementary sources of finance

Complementary sources have played a marginal role in financing health care. The national government finances investments and tertiary care at university hospitals *(14,16)* and contributes to the mandatory health insurance scheme on behalf of economically inactive residents. In the national and international health accounts these expenditures are listed as social insurance expenditures. Municipalities used to play a relatively small role in financing health care. From their budgets they contributed a lump sum of SKK 200 million in 1996, SKK 199 million in 1997 and SKK 176 million in 1998. Following the decentralization of hospitals, the municipalities' role in financing health care has been increasing to a not yet quantifiable degree.

The Government created the State Health Fund in the early 1990s in order to collect resources from privatization, penalties and gifts for the support of priority programmes in the health sector. The allocation amounted to SKK 504 million in 1996, SKK 180 million in 1997 and SKK 56 million in 1998. Later the allocations became marginal: SKK 20 million in 1999, SKK 16 million in 2000 and SKK 12 million in 2001. The fund was abolished by legislation adopted in 2001.

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. Valid data on such expenditures are not available currently.

Out-of-pocket payments

Private households have been contributing about 10% of total health care expenditure. These data include formal co-payments and out-of-pocket payments for excluded services or products but not informal payments. Some outpatient care providers choose not to contract with the health insurance companies and all costs for the service provided are borne by the users, however use of these services can be characterized as marginal. Since 1996 the Statistical Office of the Slovak Republic has monitored formal co-payments. Patient co-payments increased continuously from SKK 2.45 billion in 1996 to SKK 6.83 billion in 2002 (Table 3).

A prescription for drugs classified in the first category does not require co-payments although the patients must pay part of the cost of drugs if they prefer a drug from the second category (see *Pharmaceuticals and health technology assessment*). However, the physician must inform patients about the possibility of receiving free of charge drugs. People also pay part of the cost of some medical devices, particularly some dental products, and there are out-of-pocket payments for some spectacle frames. In these cases cash payments are made directly to the pharmacies and opticians.

Co-payments for hotel services and other service aspects of health care were introduced in June 2003 (Table 10) (see *Health care benefits and rationing*). At the same time, exemptions were introduced to limit the impact of co-payments for certain social groups including people with learning disabilities, those with a health status that makes it impossible for them to provide consent, children under 6, blood donors, patients with mental illness and patients with serious disabilities. These groups are exempt from user charges. Although final data for the year 2003 currently are not available, it is expected that the recent reform of co-payments has led to a further increase in out-of-pocket expenditures.

Informal out-of-pocket payments for health services are presumed to be substantial but accurate numbers are not available. Moreover, despite widespread recognition that informal payments play an important role in determining the process of seeking care, it is not easy to quantify the influence and impact of informal payments on health services utilization. The main source of information is the World Bank/USAID 1999 survey *(21)*. This estimated that three in ten hospital patients made "gratitude payments", the size of which ranged from a modest SKK 20 to a huge SKK 100 000 per hospital admission. Patients made informal payments for several reasons, most importantly in expectation of better care and as gratuity payments. Other reasons included preferential treatment, culture and habit, and expectation of quality drugs (Fig. 3). However, a survey on this topic conducted in early 2004 estimated that the introduction of co-payments in June 2003 was largely responsible for changing the Slovak population's approach – the number of patients making informal out-of-pocket payments had decreased from 3 in 10 to 1.5 in 10.

Table 10. Overview of the co-payments for provision-related services (in SKK), 2003

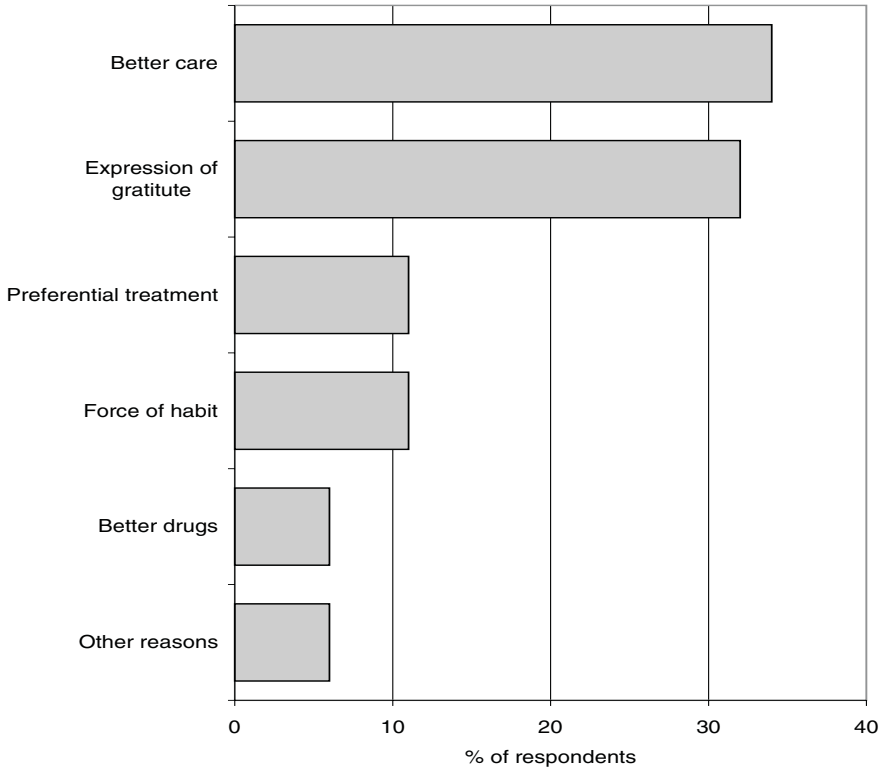
Subject of payment	Amount	Income of HIC	Income of provider
Primary care provision related services (per visit)	20	0	20
Secondary care provision related services (per visit)	20	0	20
Hotel and food services (per day)	50	0	50
Non-emergency patient transport (per kilometre)	2	0	Based on the distance
Prescription fee (per prescription)	20	15	5

Source: Ministry of Health, 2003.

Voluntary health insurance

Voluntary health insurance is offered as contractual health insurance but it represents a very small proportion of health care spending in Slovakia. It is used by those who are excluded from mandatory health insurance (without permanent residence and not employed in Slovakia, as well as those with permanent residence in Slovakia but health insurance abroad). Voluntary health insurance also covers services not covered by mandatory health insurance, the most important of which is probably the reimbursement of health care services provided abroad. Coverage of these services is very restricted (both in scope and the sum reimbursed) under the mandatory health insurance scheme. For this

Fig. 3. Patients' reasons for making informal payments,1999



Source: Anderson, 2000 *(21)*.

reason voluntary health insurance is widely used by individuals and employers when travelling abroad. The health insurance companies collaborate with commercial insurance houses to provide such health insurance.

As part of a fundamental reform passed by the parliament in October 2004 the Act on Health Insurance was completely revised (see *Planning, regulation and management*). Besides a "mandatory public health insurance" covering a basic benefit package the law introduces a "voluntary individual health insurance", which will complement the mandatory insurance by covering co-payments and offering supplementary services such as accommodation. This voluntary health insurance will represent an alternative to formal out-of-pocket payments and help to reduce informal payments. It will be offered separately from the public health insurance by commercial insurance houses on the basis of permits granted by the Financial Market Authority (see *Health care reforms*).

External sources of funding

Since 1993 several external sources have provided funding for the Slovak health sector. The Government of Switzerland has offered assistance for the purchase and utilization of medical equipment in intensive care units. USAID has supported substantially the establishment of a cardiac surgery centre for children in Bratislava and offered considerable technical assistance and human resource training and development aimed at strengthening professional and management capacities within the health sector. The European Union has offered assistance under the PHARE programme. Similarly WHO Regional Office for Europe, under the EUROHEALTH programme, has provided substantial technical assistance in environmental health, the prevention of noncommunicable diseases through the CINDI programme, AIDS prevention and health promotion programmes such as healthy cities and health-promoting schools. These sources were not included in the health care expenditure figures.

In addition both foreign agencies and domestic private firms have provided substantial assistance to individual health care providers. These accounted for SKK 203 million in 1997 and SKK 218 million in 1998. In 1999 the Japanese Government granted US $509 400 to the Ministry of Health through the World Bank's Policy and Human Resources Development grant in order to initiate preparatory work on the Health Sector Modernization Project. In June 2003 the World Bank signed an agreement to provide another US $750 000 for preparation of the loan to finance the Health Sector Modernization Project in Slovakia. On 20 August 2003 Government Resolution No. 740/2003 approved receipt of the €55 million World Bank loan to support the Health Sector Modernization Project, as well as an additional €13.4 million to finance technical assistance to the Health Sector Modernization Project.

Health care expenditure

In 2002 Slovakia spent a total of SKK 62.4 billion on health care (Table 11). This was 5.7% of GDP, below the 6.5% EU-10 average and the 9.0% average of both the EU-15 and EU-25 (Fig. 4 and Fig. 5). Per capita adjusted for purchasing power (PPP) the country spent US $633 in 2001 and US $698 in 2002, less than the EU-10 average of US $PPP756 in 2001. Health care also was substantially cheaper than the average EU-15 expenditure of US $PPP2323 (Fig. 6).

Health spending as a share of GDP increased from 5.3% in 1993 to 7.5% in 1996 compared to expenditures of about 5% during the socialist regime in the 1980s. Total health expenditures had decreased since 1997 but there was a small increase in 2002 (Table 11, Fig. 4).

Since 1999, national data on health expenditures have been consistent with OECD Health Data *(4)* and figures in the WHO health for all database following the Institute of Health Information and Statistics' recalculation of national health accounts according to the OECD system of health accounts methodology. The data for previous years are less clear as methodologies were changed several times. Before 1996, for example, it seems that it was mostly the resources allocated and spent through the health insurance system that were taken into account. Therefore, the share of private sources and, consequently, the total expenditure may be underestimated. Subsequent methodology assessed both private and governmental sources more in 1996 and 1997 but for 1998 the Ministry of Finance revised this again. Thus, data differ by source, for example in 1998, between 47.0 billion according to national figures (Table 11) and 44.6 billion according to WHO figures (Fig. 4) and OECD Health Data *(4)*. This would account for either 6.1% or 5.8% of GDP depending on the source of data.

The total resource allocation to the health sector and the appropriate private-public mix has been subject to ongoing political and public debate. In 1999 the Ministry of Health argued that the real needs of health care were 20% higher than available resources *(22)*. Although proclaimed in the government policy paper *Transformation steps in the health sector for 1999–2002 (12)*, there was no increase in either public or total funds. The main arguments for this were the need for a strict fiscal policy with tight control of public expenditures, the perceived inefficiency in the utilization of public resources in health care and the perceived need to motivate citizens to pay more of their health care costs themselves.

Cost-containment and strict fiscal policies led to a decrease in GDP that affected the state's contribution to the social health insurance companies on behalf of the economically inactive. With 89% of total expenditure spent on health in 2002, the public share was somewhat lower than in the Czech Republic but higher than in other EU countries (Fig. 7).

Yet the relative long-term stability of health expenditures as a share of GDP does not reflect the real health care costs accrued in the same years. The figures show neither the amount of informal payments nor the cumulative health care sector debts and should therefore not be interpreted as an obvious indicator of long-term stability or the success of cost-containment policies (see *Out-of-pocket payments*).

The structure of health care expenditure developed unfavourably during the reforms. Particularly the costs of drugs grew very rapidly and amounted to 37% of total expenditures in 2002, the highest share in OECD and EU countries (see *Pharmaceuticals and health technology assessment*). At the same time, as a

percentage of total health care the expenditures on primary care dropped from 15% in 1997 to 11% in 1998 and 10% in 2002. The expenditure on outpatient specialist care dropped more significantly from 19% in 1997 to 7% in 1998 and 5% in 2002. In contrast inpatient care's share of total health care expenditure jumped from 29% in 1997 to 44% in 1998, but dropped to 40% in 2002.

To conclude, in recent years the growth of expenditure on drugs prescribed in outpatient care has been associated with a serious decrease in the funds

Table 11. Trends in health care expenditure, 1990–2002

	1990	1992	1994	1996	1998	1999	2000	2001	2002
Total expenditure in current prices (billion SKK[a])[b]	13.4	19.1	21.6	42.9	47.0	48.7	51.6	56.2	62.4
Total expenditure as % of GDP	5.4	6.4	5.7	7.5	6.6	5.8	5.6	5.7	5.8
Public expenditure as % of total expenditure	100.0	100.0	100.0	92.5	90.7	89.6	89.4	89.3	89.1
Public expenditure as % of GDP	5.4	6.4	5.7	6.9	6.0	5.2	5.1	5.1	5.2

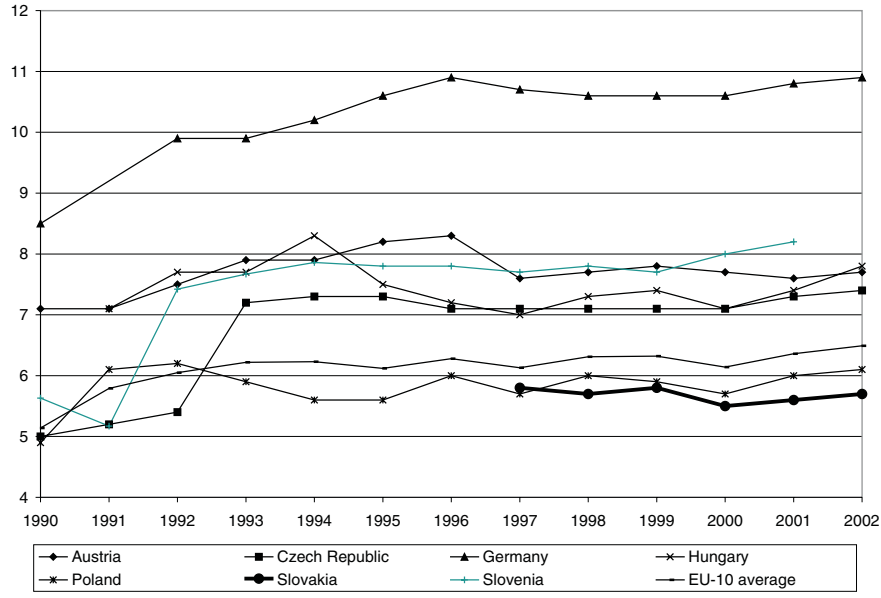
Sources: for 1990–1995: Ministry of Health 1991–1996 *(23)*; for 1997–1999: Statistical Office of the Slovak Republic and Ministry of Finance *(24);* for 2000–2002: Statistical Office of the Slovak Republic and Institute of Health Information and Statistics *(25).*

Note: [a] Until 1992 in Czechoslovak koruna; [b] figures do not include external sources.

available for primary and specialist outpatient care. This trend led to lower relative incomes for the outpatient providers as a consequence of rising operating costs. In turn, this limited investment in equipment and premises produced lower satisfaction with the health system and, in some cases, unsatisfactory delivery of these services.

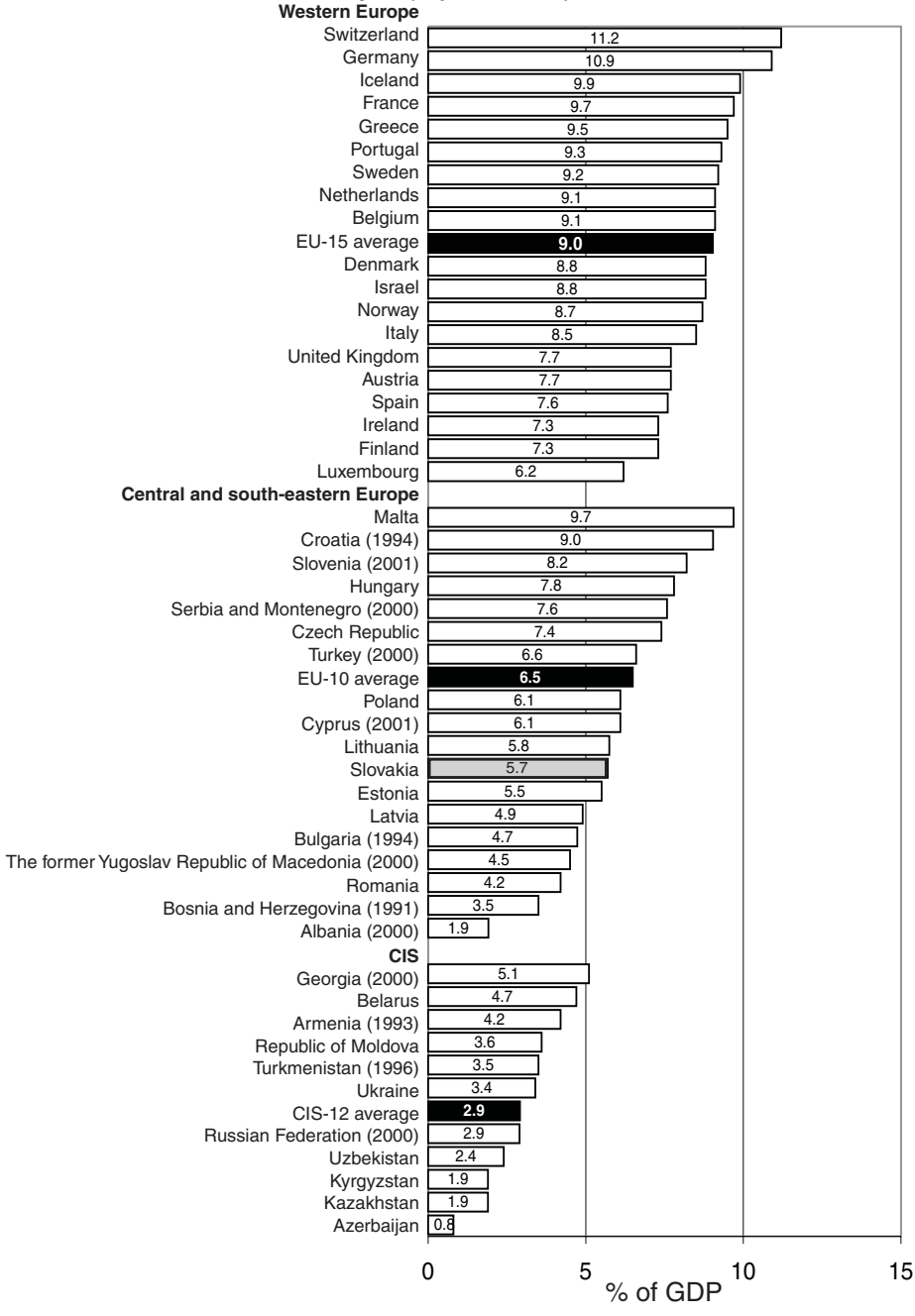
As a result of the early health care reforms in the 1990s, primary health care services have become separated from the public health services. The former are regulated by the Act on Health Care Delivery and reimbursed from the mandatory health insurance scheme based on the Act on the Treatment Code. The latter are provided by budgetary organizations (state-owned, run and financed) and operate on the basis of the Act on Health Protection. A similar situation existed until 1966 (see *Historical background*) and influenced substantially the preventive and health education programmes of the time.

Fig. 4. Trends in health care expenditure as a share of GDP (%) in Slovakia, selected countries and EU-10 average, 1990–2002



Source: WHO Regional Office for Europe health for all database, June 2004.

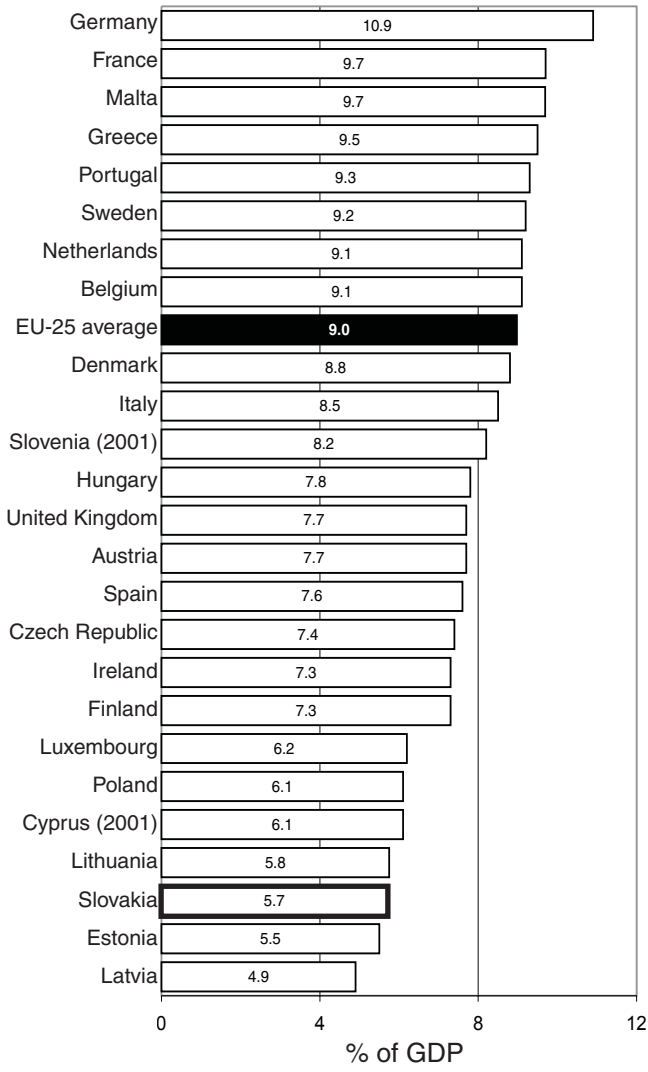
Fig. 5a. Total expenditure on health as a % of GDP in the WHO European Region, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

Note: CIS: Commonwealth of independent states; EU: European Union; EU-10 average: for new member states after 1 May 2004; EU-15 average: for member states prior to 1 May 2004. Countries without data not included.

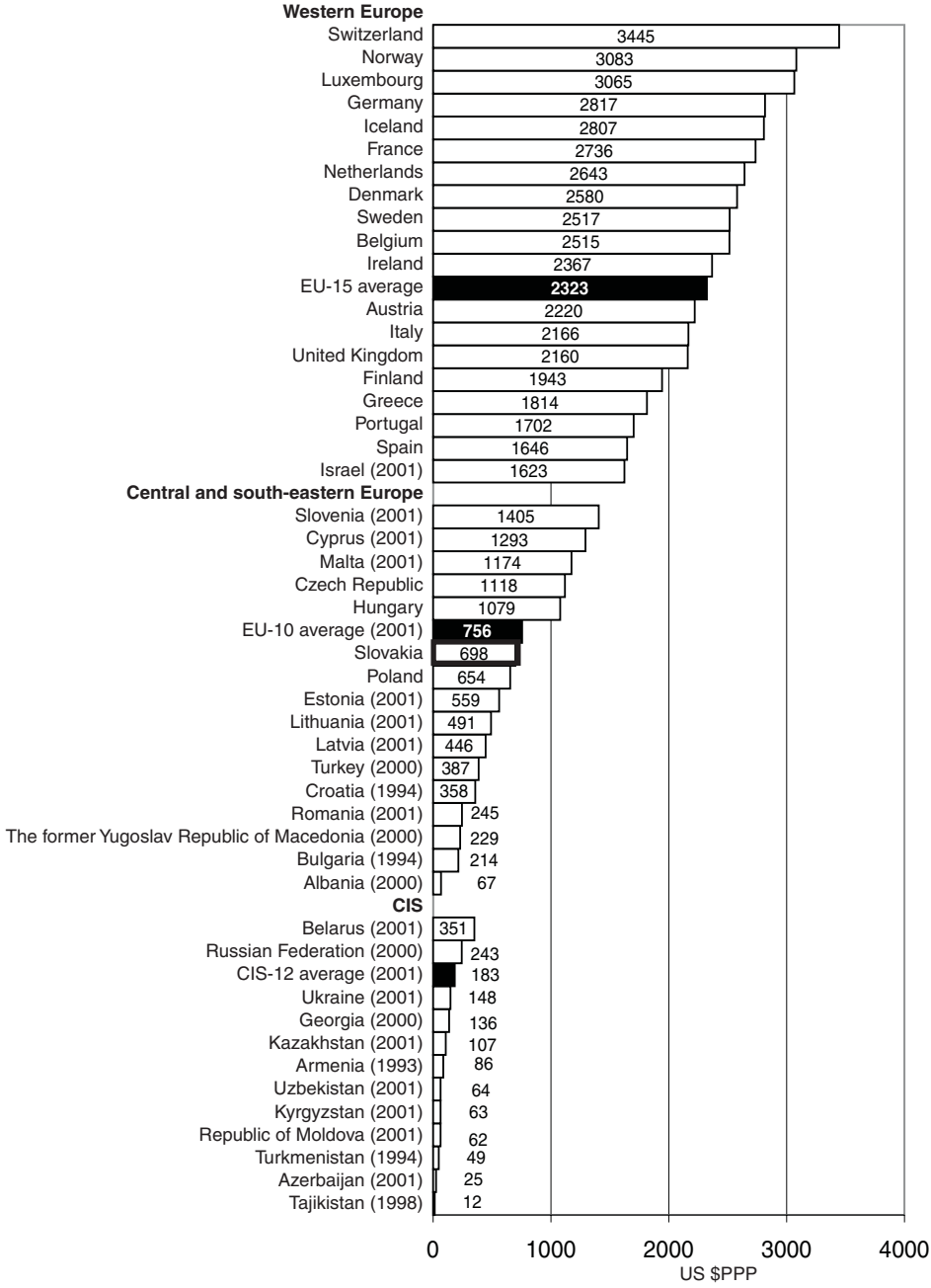
Fig. 5b. Total expenditure on health as a % of GDP in the European Union, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

Note: EU: European Union; EU-25 average: all member states. Countries without data not included.

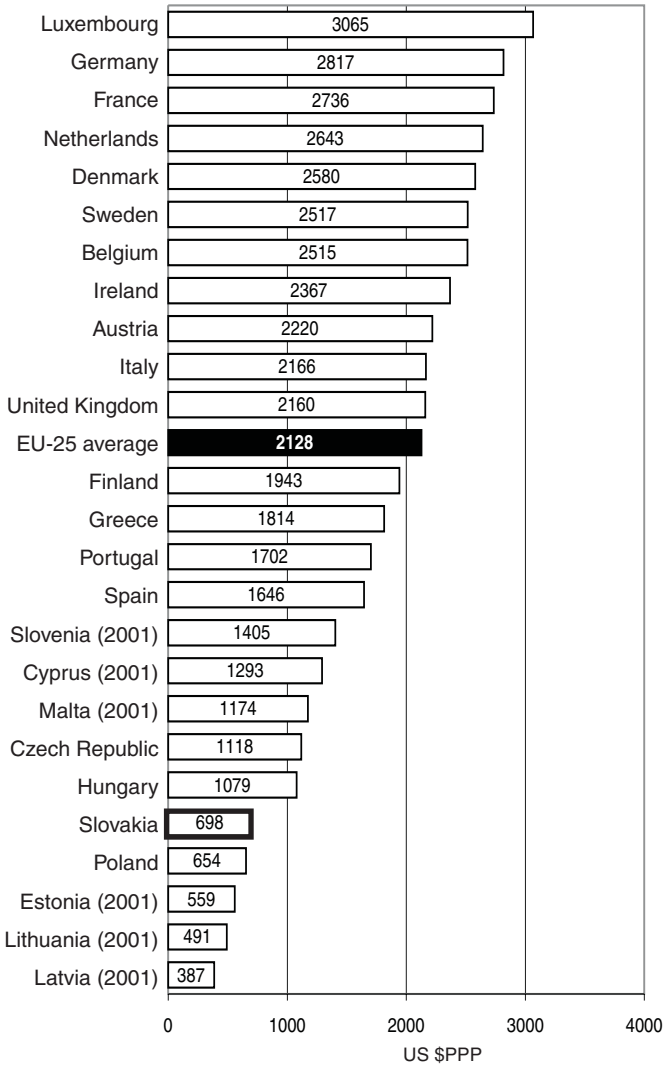
Fig. 6a. Health care expenditure in US $PPP per capita in the WHO European Region, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

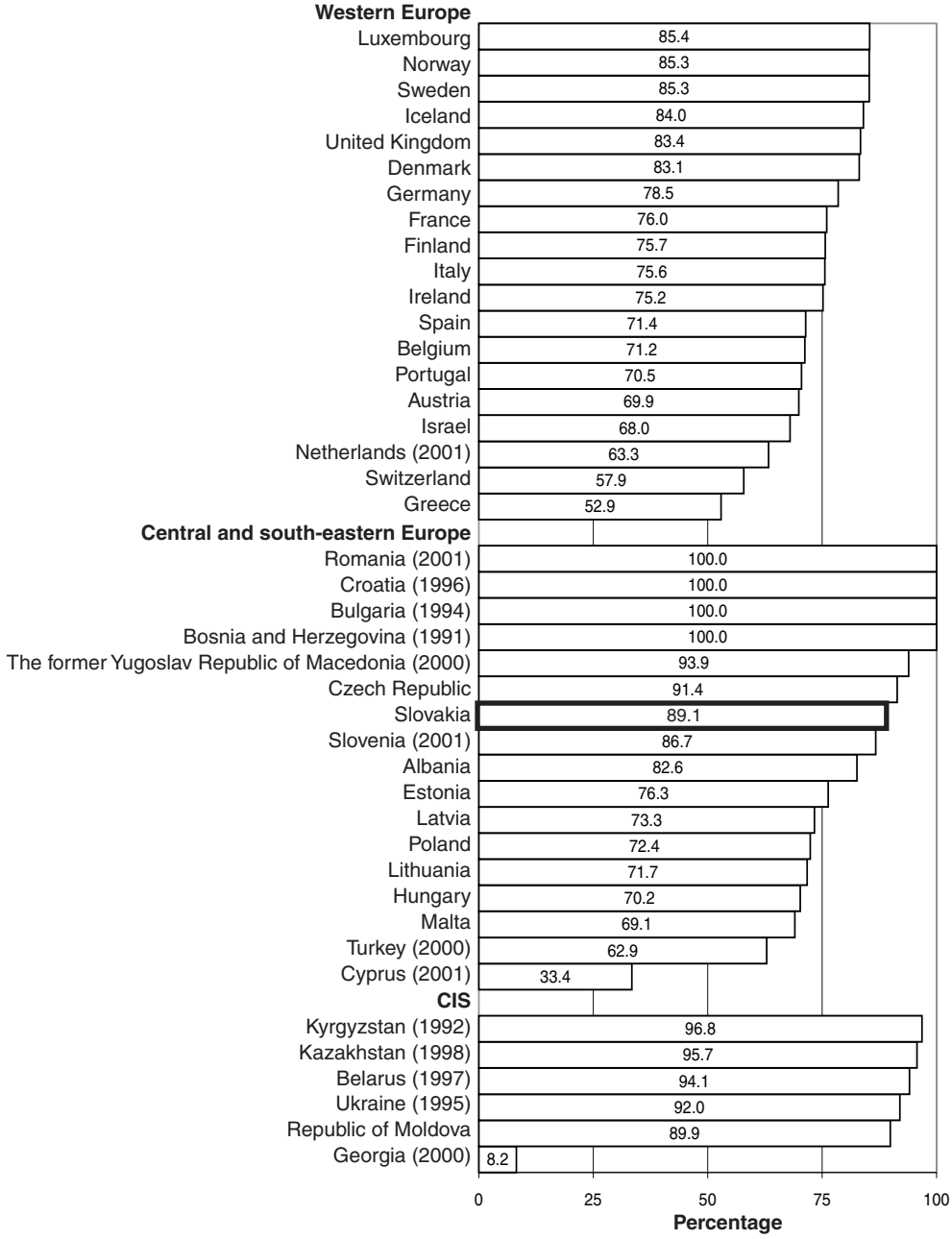
Note: CIS: Commonwealth of independent states; EU: European Union; EU-10 average: for new member states after 1 May 2004; EU-15 average: for member states prior to 1 May 2004; EU-25 average: for all member states. Countries without data not included.

Fig. 6b. Health care expenditure in US $PPP per capita in the European Union, 2002 or latest available year (in parentheses)



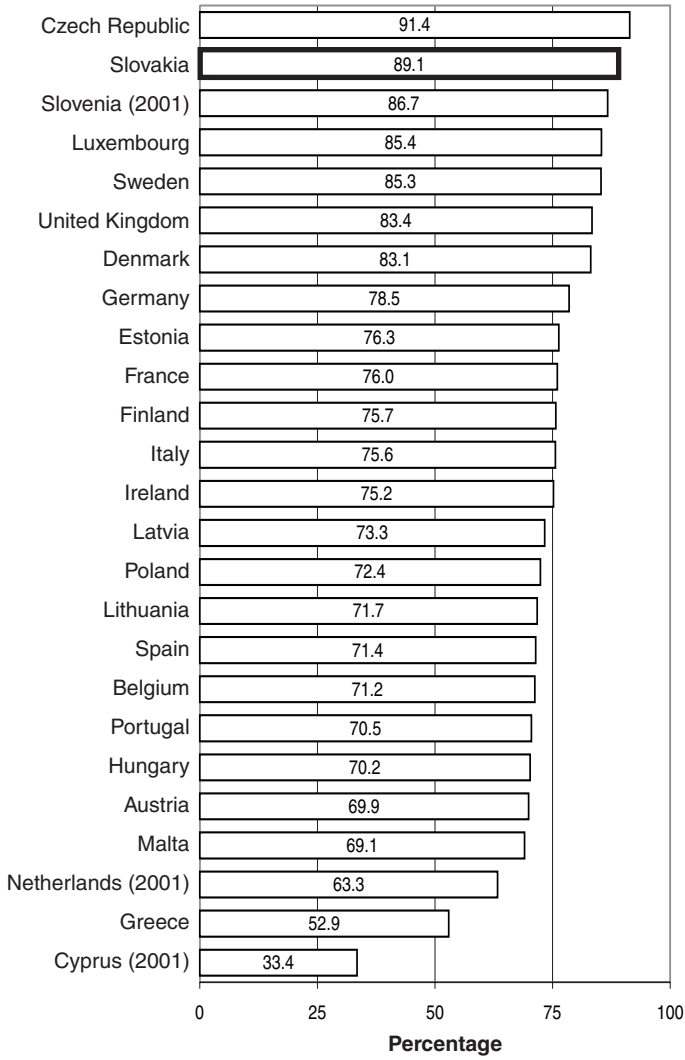
Source: WHO Regional Office for Europe health for all database, June 2004.
Note: EU: European Union; EU-25 average: all member states.

Fig. 7a. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.
Note: CIS: Commonwealth of independent states; countries without data not included.

Fig. 7b. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the European Union, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.
Note: EU: European Union; EU-25 average: for all member states.

Health care delivery system

Public health services

Public health services in Slovakia have their origins in the hygiene stations established under the socialist health system that were transformed into institutes of hygiene and epidemiology in 1992. Since Act No. 272/1994 on Health Protection came into force on 1 January 1995, these have operated as a network of state health institutes with their management, organization and financing centralized and headed by the chief hygienist. Public health services comprised prevention and control of communicable diseases, environmental hygiene, child and youth hygiene, food safety and nutrition, preventive occupational medicine, protection against ionizing radiation, epidemiology and medical microbiology, and monitoring and analysis of the health status of the population. Health education and health promotion were added to public health services in 1995. All of these activities and tasks are financed still from the state budget.

Until 2004 the Ministry of Health, through the chief hygienist, coordinated all health protection activities and issued authorizations on the production, import and use of biological diagnostic preparations and antimicrobial substances for laboratory testing and disinfection. Some tasks were devolved to district and regional hygienists who were usually directors of the State Health Institutes. They coordinated the implementation of health protection and health promotion programmes, carried out state supervision and were equipped with the competences to enforce the regulations for health protection, such as imposing penalties for failure to follow regulations. In 2002 there were 37 state health institutes with 300 full-time physician posts, a small increase compared to 288 in 1998 *(25)*.

An amendment to the Act on Health Protection adopted in 2003 transformed the state health institutes into offices of public health and transferred the

competences of the former district and regional hygienists to these organizations. Consequently, since January 2004 all the main activities of public health are carried out by the Office of Public Health of the Slovak Republic that manages a network of 36 regional offices.

Table 12. Structure of public health institutes, 1998–2002

Year	1998	1999	2000	2001	2002
Public health institutes	37	37	37	37	37
Physician posts[a]	268	279	288	308	300

Source: Institute of Health Information and Statistics, 2003.
Note: [a] full-time equivalents.

The National Health Promotion Programme was adopted by the parliament in 1992 and the National Health Promotion Centre was established. This coordinated and supported health promotion activities in the state health institutes. These managed health promotion and health education activities through, for example, health promoting schools, healthy workplaces and healthy cities according to WHO guidelines in these areas. Health advisory centres based on the WHO CINDI programme were established in the state health institutes to help the population combat the main determinants and risk factors of noncommunicable diseases. In 1995 the National Health Promotion Programme was updated to focus on six priorities. In 1998 the Institute of Health Education was integrated into the National Health Promotion Centre that became a part of the State Health Institute of the Slovak Republic in December 2000.

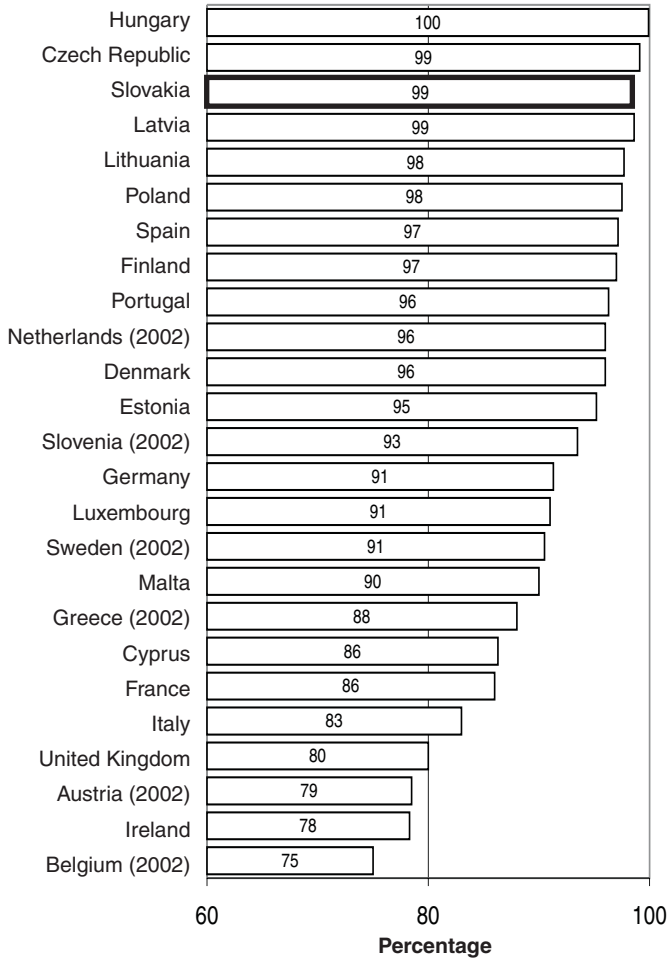
Immunization services are carried out by primary care paediatricians in close cooperation with the offices of public health in accordance with the National Immunization Programme. The state supplies vaccines free of charge through these offices. As discussed earlier, the public health infrastructure has been preserved during health sector reform and partially transformed. In future there will be greater emphasis on improving cooperation between the offices of public health and the primary health care providers for prevention and health education.

Despite the limited financial resources allocated to public health, there have been many achievements in recent years. These were due partly to wise utilization of the know-how provided by WHO and other authorities in public health: by implementing the WHO Expanded Programme on Immunization Slovakia reached one of the highest levels of immunization within Europe. This has been maintained despite the various changes in the health system. In

Fig. 8a. Levels of immunization for measles in the WHO European Region, 2003 or latest available year (in parentheses)

Source: WHO Regional Office for Europe health for all database, June 2004.
Note: CIS: Commonwealth of independent states; countries without data not included.

Fig. 8b. Levels of immunization for measles in the European Union, 2003 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.
Note: Countries without data not included.

2002 the immunization rate of infants reached 98% against poliomyelitis, 99% against diphtheria, pertussis, tetanus, and hepatitis B, 92% against *Haemophilus influenzae* diseases and 99% against mumps and rubella. The child immunization rate for measles was nearly 99% in 2002 (Fig. 8). In 1997 the Decree on Communicable Diseases was issued according to current requirements. Slovakia also has a national programme on HIV/AIDS prevention, the responsible multi-sectoral body comprises various ministers, nongovernmental organizations and other representatives. The future development of public health is expected to

be influenced largely by the harmonization process resulting from Slovakia's membership of the European Union.

Primary and secondary outpatient care

In Slovakia, secondary health care is categorized as inpatient and outpatient specialist care that is financed by different kinds of reimbursement (see *Financial resource allocation*). Primary health care includes all first contact outpatient care, both preventive and curative, including home visits and emergency health services. The four types of first contact doctors – general practitioners for adults, general practitioners for children and adolescents (caring for patients aged 0 to 18), gynaecologist-obstetricians and dentists – were preserved from the socialist health system (Table 13).

Primary health care physicians carry out basic examinations, diagnoses, interventions and treatment. However, they cannot perform some specialized diagnostic procedures or prescribe some drugs and for such cases must refer the patients to specialists. The Ministry of Health adopted concepts (strategy documents) that defined the role and responsibilities of each type of primary health care doctor. General practitioners caring for children and adolescents up to the age of 18 are involved in immunization and screening activities. Gynaecologists carry out family planning functions and provide preventive services and screening for women.

All types of primary care physicians are gatekeepers by law, making referrals to specialist out- and inpatient care. But despite primary care doctors' gatekeeping role patients may self-refer to an ophthalmologist in cases of eye injury or for the prescription of spectacles and, in some cases, go directly to psychiatrists, geneticists, and specialists in sexually transmitted diseases. Moreover, those with chronic illnesses who are registered in a specialist's clinic have direct access to the appropriate specialist physicians. However, patients have a common tendency to bypass the primary care level, thus effectively duplicating health services, placing a heavy burden on hospitals and specialized institutes and generally contributing to increased costs in the system *(7,16)*. Nurses and paramedical personnel, including dental technicians, support primary health care provision. Occupational health care services (protection against occupational diseases, accident prevention and first aid) were integrated with primary health care but have been separated.

Residents of Slovakia have the right to change their primary health care physician every six months. The choice of primary health care physician mainly is related to the 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 physician posts per 10 000 population in cities compared with 8.6 per 10 000 population in small towns. However, there is a little difference in accessibility or quality of care between rural and urban areas.

In 1990 there were 6257 primary health care doctors compared with 6341 in 1998 and 6452 in 2002 (Table 13). However, the 2002 increase has to be interpreted with caution as the data before 1998 did not include primary care physicians working in establishments managed by the Ministries of Interior, Defence and Transport, where not all data were publicly available. To monitor the current trend it is reasonable to compare the total numbers from 2000 to 2002. In this period the number of general practitioners for adults decreased by 170, those for children and adolescents up to the age of 18 decreased by 18 and the number of primary care dentists decreased by 63.

Physicians in primary health care usually work in single-handed practices and are almost always private. Nonetheless the 94% share of private primary health care providers in 1998, reported in the HiT in 2000 *(1)*, may be over-estimated as it excludes primary care physicians working in sectors outside health care. Notwithstanding, the share of private primary care physicians increased from 90% in 2000 to 94% in 2002 (Table 14).

Privatization of primary health care has been eased substantially by allowing private doctors to rent the same rooms and equipment (from the health centre or polyclinic) that they used while state-employed. Private primary care physicians are paid directly through contracts with health insurance companies, this reimbursement is their main source of income. From their income they employ at least one nurse, rent rooms and pay other fees. The licensing process sets the staffing level. At the beginning of privatization, the income of private physicians was two or three times higher than that of the state-employed but in recent years the difference seems less apparent (see *Payment of physicians*).

The concept of home care nursing agencies was first piloted in Slovakia in 1996 as a means of supporting primary care delivery. The number of agencies has been increasing ever since. In 1998 there were 79, 67% of which were private. In 2001 there were 110, in 2002 – 155, and in 2003 – 173 home care agencies. However, they still face some difficulties due to outstanding issues in legislation and financing (see *Social care*). As part of the process of Slovakia's integration into the European Union the certification of primary care doctors and nurses has been harmonized (see *Human resources*).

In 2002 there were 4389 specialists, expressed in full-time equivalents, working in secondary outpatient care compared with 3903 in 1998. Approximately 55% were operating on a private profit-making basis based on

Table 13. Structure of primary care units, 2000–2002

Year	Type of primary care	Number of units		
		Total	Non-state	State[a]
2000	GPs for adults	2 532	2 157	375
	GPs for children and adolescents	1 392	1 288	104
	Gynaecologists-obstetricians	572	515	57
	Dentists	2 716	2 490	226
2001	GPs for adults	2 480	2 130	350
	GPs for children and adolescents	1 337	1 255	82
	Gynaecologists-obstetricians	553	498	55
	Dentists	2 634	2 444	190
2002	GPs for adults	2 411	2 179	232
	GPs for children and adolescents	1 358	1 305	53
	Gynaecologists-obstetricians	603	555	48
	Dentists	2 625	2 481	144

Source: Institute for Health Information and Statistics, 2003 *(26).*

Note: [a] Including primary care units outside the health care sector.

Table 14. Number of primary care physicians, 1998–2002

Primary care physicians	1998	1999	2000	2001	2002
Total	6 341	6 290	6 684	6 489	6 452
State	386	358	670	583	376
Non-state	5 955	5 932	6 014	5 906	6 076

Source: Institute of Health Information and Statistics, 2003.

Note: Data for 2000–2002 include also physicians in other sectors than health.

Table 15. Share (%) of state vs. non-state primary care physicians, 1998–2002

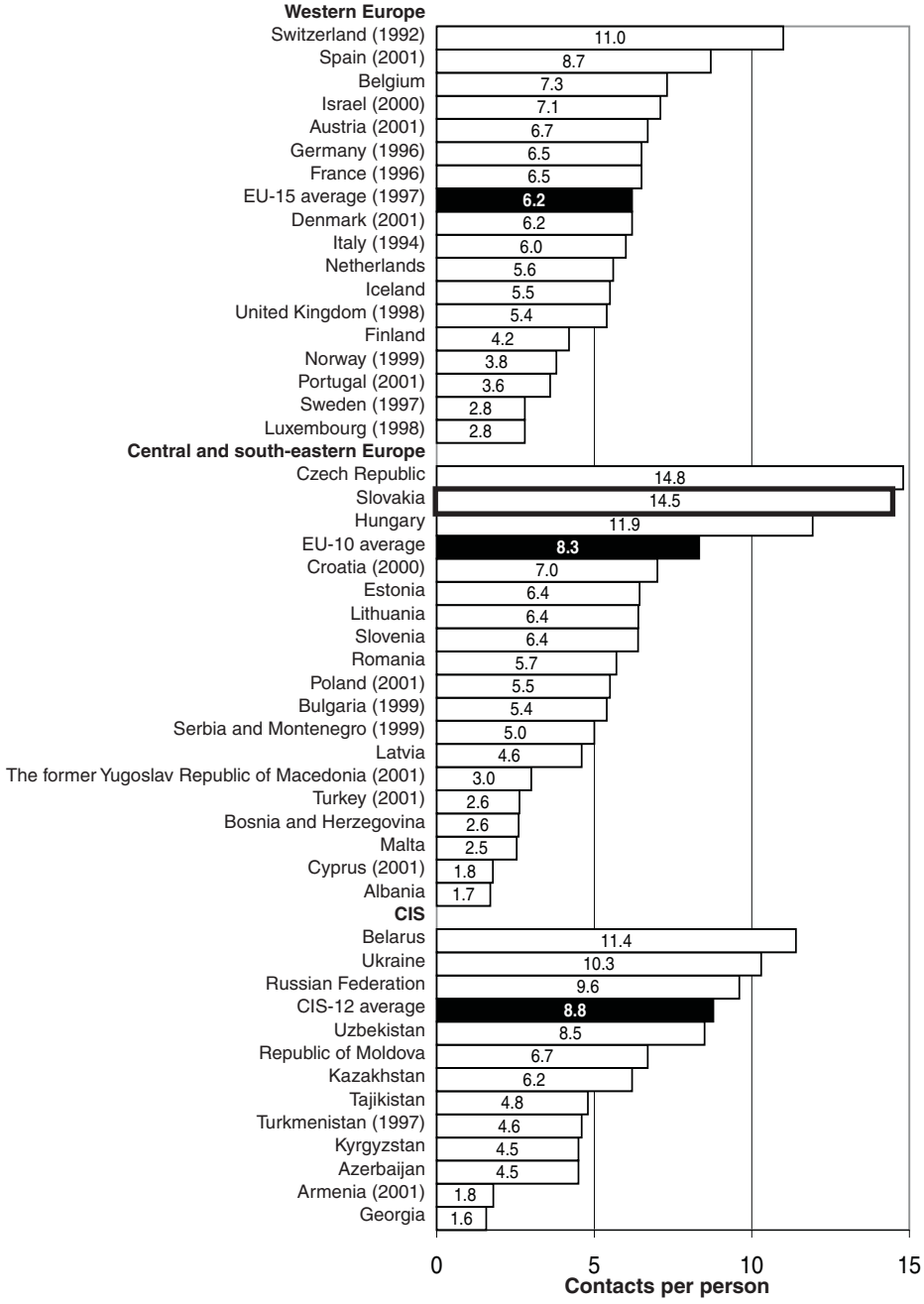
Primary care physicians	1998	1999	2000	2001	2002
Total	100.0%	100.0%	100.0%	100.0%	100.0%
State	6.1%	5.7%	10.0%	9.0%	5.8%
Non-state	93.9%	94.3%	90.0%	91.0%	94.2%

Source:Institute of Health Information and Statistics, 2003 *(26).*

Note: Data for 2000–2002 include also physicians in other sectors than health.

contracts with the health insurance companies while 45% were state specialists, employed by a health facility and salaried through a national pay scale. In fact many specialists, private or state, have their offices in the stand-alone polyclinics owned by the local self-governing administration – either the municipalities or the higher territorial units at regional level. Salaried specialists working in

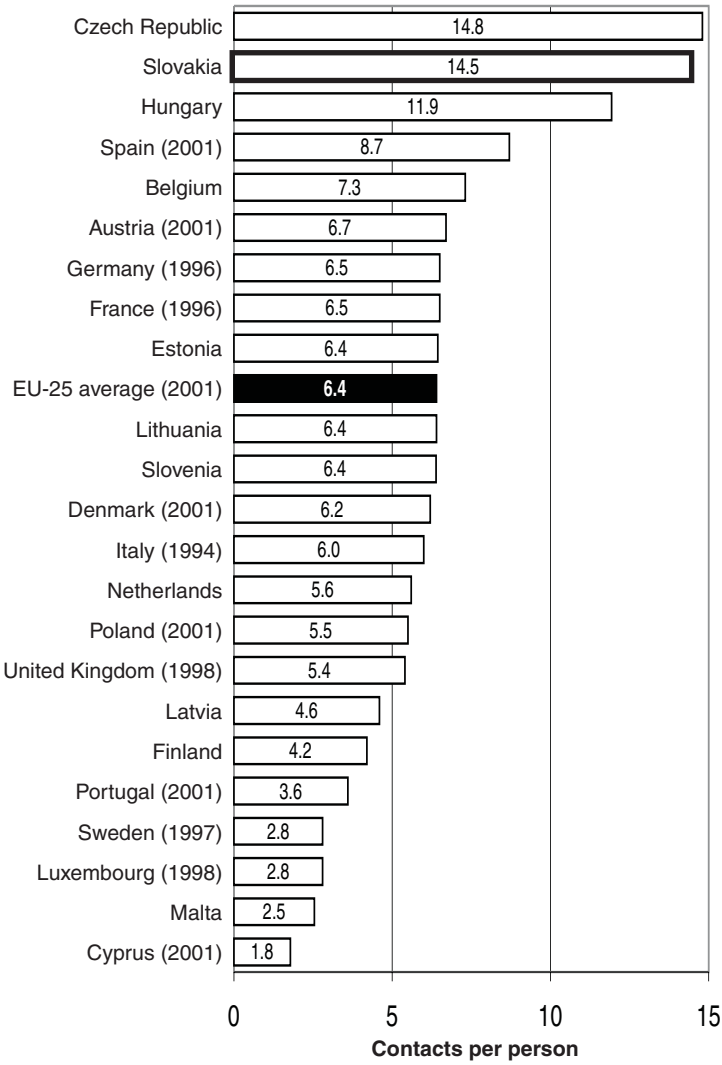
Fig. 9a. Outpatient contacts per person in the WHO European Region, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

Note: CIS: Commonwealth of independent states; EU: European Union; EU-10 average: for new member states after 1 May 2004; EU-15 average: for member states prior to 1 May 2004; countries without data not included.

Fig. 9b. Outpatient contacts per person in the European Union, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

Note: EU: European Union; EU-25 average: for all member states. Countries without data not included.

Table 16. Structure of inpatient care facilities, 1996–2002

	1996	1997	1998	1999	2000	2001	2002
Inpatient care facilities	129	134	136	134	140	137	137
– per 100 000 inhabitants[a]	2.4	2.5	2.5	2.5	2.6	2.6	2.5
Acute hospitals per 100 000 inhabitants (a)	1.8	1.8	1.7	1.7	1.8	1.8	1.8
Number of beds in inpatient care facilities (in thousands)	46.0	44.9	44.2	43.7	43.0	41.9	41.4
Hospital beds per 1000 population	8.6	8.3	8.2	8.1	8.0	7.8	7.6
Acute care beds per 1000 population[a]	7.5	7.3	7.1	7.0	6.9	6.7	6.7
Physician posts in all inpatient care facilities (full-time equivalents)	–	–	6 082	6 043	6 143	5 966	5 783

Source: Institute of Health Information and Statistics, 2003; [a] WHO Regional Office for Europe health for all database.

hospitals also are allowed to conduct private practice outside their working hours. The number of polyclinics increased from 52 in 1990 to 77 in 1998, including 23 private polyclinics. In 2002, there were 66 polyclinics and 43 specialized outpatient care establishments, essentially these are new health centres or polyclinics established by private investors. Overall, it is considered that the privatization of primary and secondary care providers in outpatient care has been effected smoothly, without a negative impact on patients.

Altogether, the number of outpatient contacts ranks substantially higher than in other EU Member States. The contact rate was 14 per capita in 2002 (Fig. 9), a decrease compared to 1998 (17 visits) but similar to rates in the 1980s *(5)*. The comparably high rate of outpatient visits is matched by a relatively high rate of admissions to acute hospitals (Table 17).

Secondary and tertiary hospital care

In 2002 Slovakia had 137 inpatient facilities with 41 365 beds. Of the 7.6 beds per 1000 population, 6.7 were provided in acute care. Although acute hospital beds were reduced steadily from 7.5 per 1000 inhabitants in 1995 to 6.7 in 2002 (Table 16), Slovakia still had the highest rate of acute beds compared to neighbouring and all EU-25 countries (Fig. 10, Fig. 11). Also the overall hospital bed capacity (7.7 per 1000) was higher than either the EU-10 (6.6) or the EU-15 average (6.1, data for 2001) *(5)*.

In 2002 18 persons per 100 inhabitants were admitted to acute hospitals. According to the data available the admission rate was lower than the EU-10 average. Also the 8.8 day average length of stay in acute hospitals was above

the EU-10 average. Altogether, the 66% bed occupancy rate of acute hospitals ranked among the lowest in the whole European Union (Table 17).

The categorization of hospitals has changed several times during the reform process (see *Regulation, planning and management*). In 1994 there were 84 hospitals, 23 specialized institutes and one maternity home in Slovakia. In 1995 the three-level classification of the socialist period was changed to a system with five types, each with its own reimbursement category. Since 1997 general hospitals are categorized into four groups with increasing degrees of specialization including category IV for teaching hospitals that were type III in socialist times. The profiles of the different types of hospitals and the numbers of the population to be served closely resemble those before 1989.

In 2004 there were 25 type I hospitals, 37 type II and 10 type III. The number of teaching hospitals increased and is currently 13, these hospitals provide the most expensive health care. Specialized hospitals play an important role in the system. While the number of physicians in hospitals increased by 24% from 4607 in 1990 to 5697 in 1998, the number of physicians in inpatient facilities decreased by 3.5% between 1998 and 2002 (Table 15).

Despite growing financial problems in the health sector, the number of highly specialized hospitals has increased in comparison with the situation before 1989. Highly specialized health care facilities have been built extensively in recent years as the government prioritized the programmes for dialysis, plasmapheresis, cardiovascular disease and cancer. The aim of the dialysis programme was to increase the number of dialysis centres so that every patient is within 50 km. The number of dialysis stations increased from 64 in 1991 to 510 in 2002. The Slovak Institute of Cardiovascular Diseases in Bratislava was placed in a completely new building. In 1998 the first heart transplants were performed. Within the framework of the cardiovascular programme, seven centres for intervention and invasive cardiology and, in 2003, two independent cardiac surgery hospitals for adults were established in central and eastern Slovakia. In addition, the Cardiosurgery Hospital for Children was established in Bratislava.

The expansion of the specialized inpatient facilities seems to be driven by the attempt to ensure the financial flow towards the priorities chosen by the Ministry of Health in an environment where the general hospitals cross-subsidize their departments. Thus, the representatives of the most powerful departments attracted more funding to general hospitals and established their own priorities, sometimes very different to those promoted by the government.

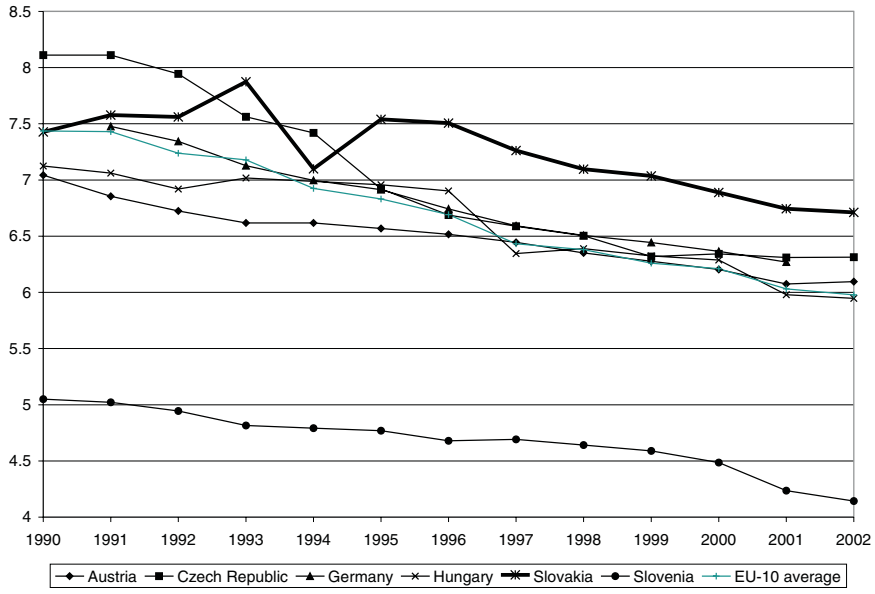
During the period from 1999 to 2002, the existing capacity and network of health care providers was analysed and the document *Optimum network of health care facilities in the Slovak Republic (27)* was developed using a

regional model (see *Planning, regulation and management*). This master plan was adopted in June 2002 and provided the basis for subsequent adjustments in the structure of both inpatient and outpatient care providers. The total number of acute beds was reduced; 6000 were closed or transformed into chronic care beds. Moreover, three acute care hospitals were closed and several others transformed into almost exclusively chronic (long-term) care facilities. In two cases hospitals were merged and in many cases excessive building capacity was sold. The number of nurses employed in inpatient care in acute hospitals decreased by approximately 1800, a 9% reduction of 1998 staff numbers. This reduction process continued rapidly during 2003.

Moreover, the latest amendments of the current health care legislation passed by parliament in October 2004 simplify the current categorization of hospitals by introducing just two types of general and specialized hospitals (see *Health care reforms*).

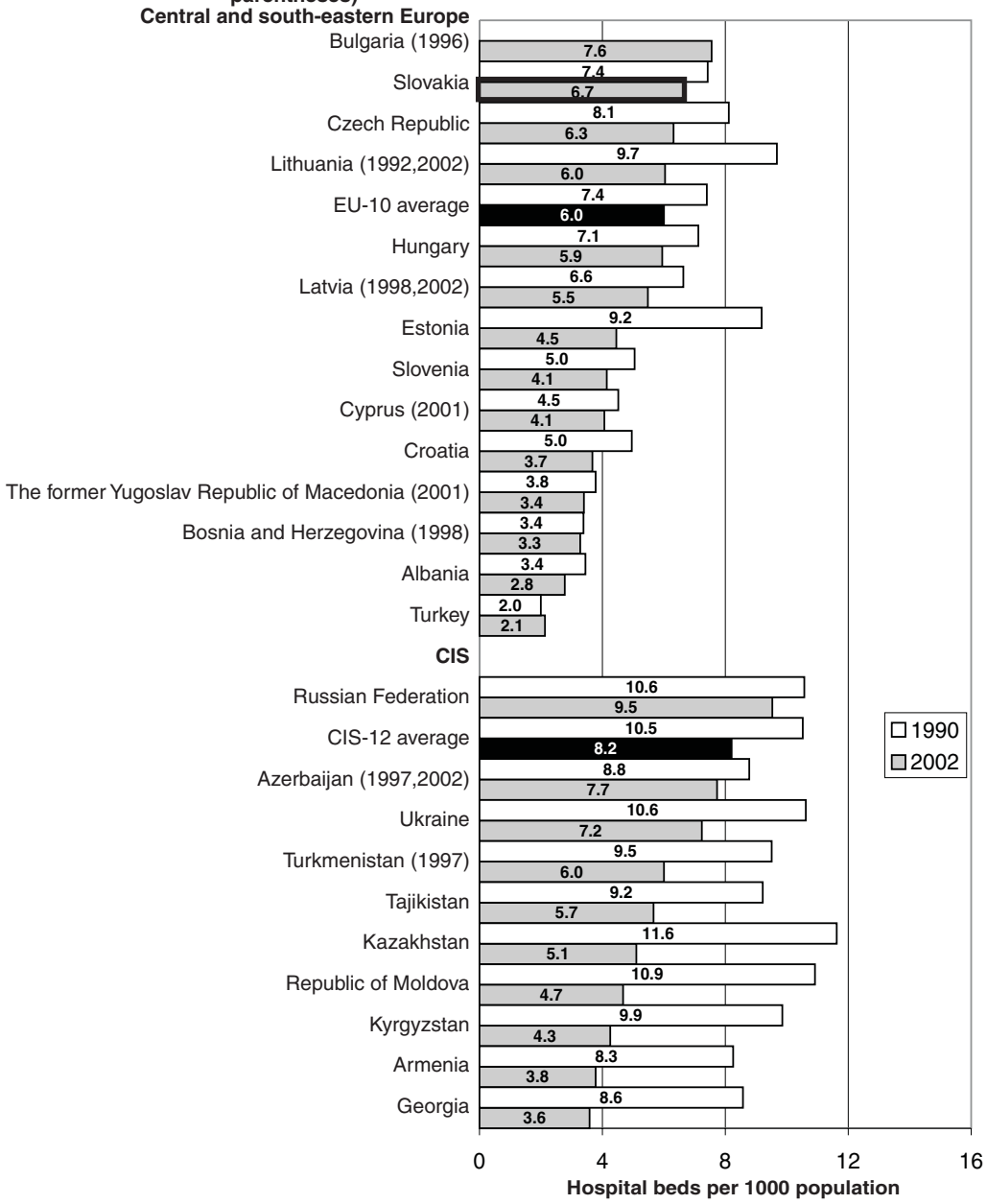
The financing of inpatient care has been changed several times (see also *Payment of hospitals*). At the end of 1998, the system moved from per diem reimbursement to prospective budget payments. The Ministry of Health prepared

Fig. 10. Hospital beds in acute hospitals per 1000 population in Slovakia, selected countries and EU-10 average, 1990–2002



Source: WHO Regional Office for Europe health for all database, June 2004.

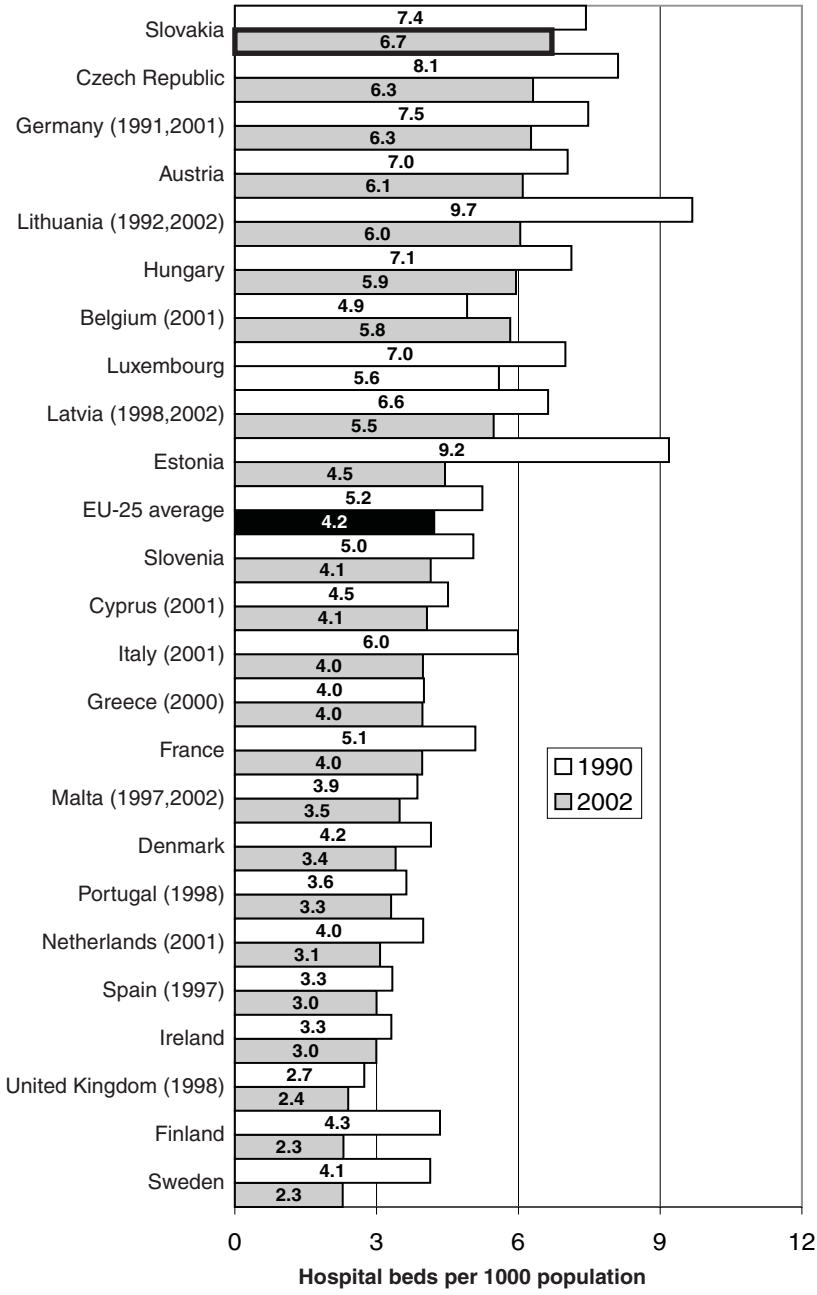
Fig. 11a. Hospital beds in acute hospitals per 1000 population in central and south-eastern Europe and CIS countries, 1990 and 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

Note: CIS: Commonwealth of independent states; EU: European Union; EU-10 average: for new member states after 1 May 2004; countries without data not included.

Fig. 11b. Hospital beds in acute hospitals per 1000 population in the European Union, 1990 and 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database, June 2004.

Note: EU: European Union; EU-25 average: for all member states; countries without data not included.

Table 17a. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2002 or latest available year

	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Andorra	2.8	10.1	6.7[c]	70.0[c]
Austria	6.1	28.6	6.0	76.4
Belgium	5.8[a]	16.9[c]	8.0[c]	79.9[d]
Denmark	3.4	17.8*a*	3.8[a]	83.5[b]
EU-15 average	4.1	18.1[c]	7.1[c]	77.9[d]
Finland	2.3	19.9	4.4	74.0[g]
France	4.0	20.4[c]	5.5[c]	77.4[c]
Germany	6.3[a]	20.5[a]	9.3[a]	80.1[a]
Greece	4.0[b]	15.2[d]	–	–
Iceland	3.7[f]	15.3[d]	5.7[d]	–
Ireland	3.0	14.1	6.5	84.4
Israel	2.2	17.6	4.1	94.0
Italy	4.0	15.7[a]	6.9[a]	76.0[a]
Luxembourg	5.6	18.4[h]	7.7[d]	74.3[h]
Monaco	15.5[g]	–	–	–
Netherlands	3.1[a]	8.8[a]	7.4[a]	58.4[a]
Norway	3.1[a]	16.0[a]	5.8[a]	87.2[a]
Portugal	3.3[d]	11.9[d]	7.3[d]	75.5[d]
Spain	3.0[e]	11.5[d]	7.5[d]	76.1[d]
Sweden	2.3	15.1	6.4	77.5[f]
Switzerland	4.0	16.3[d]	9.2	84.6
United Kingdom	2.4	21.4[f]	5.0[f]	80.8[d]
Central and south-eastern Europe				
Albania	2.8	–	–	–
Bosnia and Herzegovina	3.3[d]	7.2[d]	9.8[d]	62.6[c]
Bulgaria	7.6	14.8[f]	10.7[f]	64.1[f]
Croatia	3.7	13.8	8.7	89.6
Cyprus	4.1[a]	8.1[a]	5.5[a]	80.1[a]
Czech Republic	6.3	19.7	8.5	72.1
Estonia	4.5	17.2	6.9	64.6
EU-10 average	6.0	20.1	7.7	72.6
Hungary	5.9	22.9	6.9	77.8
Latvia	5.5	18.0	–	–
Lithuania	6.0	21.7	8.2	73.8
Malta	3.5	11.0	4.3	83.0
Slovakia	6.7	18.1	8.8	66.2
Slovenia	4.1	15.7	6.6	69.0
The former Yugoslav Republic of Macedonia	3.4[a]	8.2[a]	8.0[a]	53.7[a]
Turkey	2.1	7.7	5.4	53.7
CIS				
Armenia	3.8	5.9	8.9	31.6[a]
Azerbaijan	7.7	4.7	15.3	25.6
Belarus	–	–	–	88.7[h]
CIS-12 average	8.2	19.7	12.7	85.4
Georgia	3.6	4.4	7.4	82.0[a]
Kazakhstan	5.1	15.5	10.9	98.5
Kyrgyzstan	4.3	12.2	10.3	86.8
Republic of Moldova	4.7	13.1	9.7	75.1
Russian Federation	9.5	22.2	13.5	86.1
Tajikistan	5.7	9.1	12.0	55.1
Turkmenistan	6.0[e]	12.4	11.1[e]	72.1[e]
Ukraine	7.2	19.2[e]	12.3	89.2
Uzbekistan	–	–	–	84.5

Source: WHO Regional Office for Europe health for all database, June 2004.

Notes: [a] 2001; [b] 2000; [c] 1999; [d] 1998; [e] 1997; [f] 1996; [g] 1995; [h] 1994; CIS: Commonwealth of independent states; EU: European Union; EU-10 average: for new member states after 1 May 2004; EU-15 average: for member states prior to 1 May 2004. Countries without data not included.

Table 17b. Inpatient utilization and performance in acute hospitals in the European Union, 2002 or latest available year

	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Austria	6.1	28.6	6.0	76.4
Belgium	5.8[a]	16.9[c]	8.0[c]	79.9[d]
Cyprus	4.1[a]	8.1[a]	5.5[a]	80.1[a]
Czech Republic	6.3	19.7	8.5	72.1
Denmark	3.4	17.8*a*	3.8[a]	83.5[b]
Estonia	4.5	17.2	6.9	64.6
EU-25 average	4.2	18.1[a]	7.0[a]	77.1[a]
Finland	2.3	19.9	4.4	74.0[g]
France	4.0	20.4[c]	5.5[c]	77.4[c]
Germany	6.3[a]	20.5[a]	9.3[a]	80.1[a]
Greece	4.0[b]	15.2[d]	–	–
Hungary	5.9	22.9	6.9	77.8
Ireland	3.0	14.1	6.5	84.4
Italy	4.0	15.7[a]	6.9[a]	76.0[a]
Latvia	5.5	18.0	–	–
Lithuania	6.0	21.7	8.2	73.8
Luxembourg	5.6	18.4[h]	7.7[d]	74.3[h]
Malta	3.5	11.0	4.3	83.0
Netherlands	3.1[a]	8.8[a]	7.4[a]	58.4[a]
Portugal	3.3[d]	11.9[d]	7.3[d]	75.5[d]
Slovakia	6.7	18.1	8.8	66.2
Slovenia	4.1	15.7	6.6	69.0
Spain	3.0[e]	11.5[d]	7.5[d]	76.1[d]
Sweden	2.3	15.1	6.4	77.5[f]
United Kingdom	2.4	21.4[f]	5.0[f]	80.8[d]

Source: WHO Regional Office for Europe health for all database, June 2004.

Notes: [a] 2001; [b] 2000; [c] 1999; [d] 1998; [e] 1997; [f] 1996; [g] 1995; [h] 1994; EU: European Union; EU-25 average: for all member states. Countries without data not included.

prospective budgets for each hospital based on historical costs and taking account of the main performance indicators. The introduction of prospective budgets was intended to cap expenditure at a certain level but hospitals had to operate with limited amounts of money that did not cover their costs.

Currently, the hospitals are in debt and their equipment is mostly obsolete owing to very low or zero capital investment. Sometimes hospitals have difficulties in purchasing enough drugs or medical devices to ensure appropriate services. Although the last years' reforms have eliminated some of the oversupply in inpatient health services and somewhat increased the efficiency of health care provision, inpatient care still suffers from many problems caused by insufficient financing, inefficient use of resources and accumulated debts. However, the issues of inpatient care have to be seen in a wider context where

the inappropriately structured network of inpatient and outpatient health care providers makes it difficult to increase the efficiency of the whole health care system per se. The current reforms of health care delivery are focused on this area, supporting the wider use of alternatives to hospital care, e.g. one-day treatment, ambulatory surgery, home care, etc. Quality initiatives are in the starting phase.

Social care

Social care services include long-term inpatient care, day care centres and social services for the elderly, patients with chronic illness or other groups with special needs such as those with learning disabilities, mental illness or physical disabilities. Legislation in Slovakia defines this as subsequent, special, and community care respectively. Health insurance companies finance subsequent and special care while community care is financed either by the state budget or through direct payments. Subsequent care follows acute care and includes nursing, rehabilitation, psychological and spa treatment.

In 1994 there were 6 institutes with 665 beds for the long-term ill, mainly for elderly people. By 1997 they had increased to 14 with 1122 beds. In 2002 there were only 10 long-term care institutes with 685 beds but 49 long-term care departments with 1958 beds. Despite the provision of another 1978 long-term care beds since 1994 still there are not enough and patients sometimes have to wait months to be admitted. Also, demand is greater as the social care institutes charge fees so families use the institutes for the long-term ill to secure more affordable care (only marginal payments are charged) for their elderly and disabled relatives.

In 1997 there were 6 rehabilitation institutes with 511 beds but these had been reduced to 3 with only 294 beds in 2002. The number of convalescent (recovery) homes decreased from 13 with 820 beds in 1994 to 12 with 702 beds in 1997 and 49 day and night sanatoria with 1462 beds in 1994 were reduced to 38 with 1095 beds in 1997. In 2002 there were 41 establishments, including 10 rehabilitation sanatoria, with 1137 beds as well as 6 sanatoria for children with 403 beds. Many of these were privatized. The number of curative spas increased from 46 with almost 11 000 beds in 1994 to 55 with 12 326 beds in 1997, but reduced to 30 spa facilities with 12 666 beds in 2002. All spas were privatized. Currently, Slovakia funds spa treatment through the health insurance scheme with patient co-payment.

Special health care includes psychiatric care and care of persons with alcohol

or drug dependency. In 1994 there were 11 psychiatric institutes with 3215 beds, compared with 12 psychiatric facilities with 3310 beds in 1997. In 2002 there were 6 psychiatric hospitals with 2300 beds and 5 psychiatric institutes with 900 beds including one children's psychiatric institute with 90 beds. The number of psychiatric departments within hospitals was 29 with 1384 beds. Care of alcohol and drug addicts was delivered in 5 specialized inpatient care departments of psychiatric hospitals with 420 beds and 9 centres for the treatment of alcohol and drug addictions with 146 beds in 2002. The Needles and Syringes Exchange project, the Programme of Vaccination against Hepatitis B for drug abusers and the Methadone Substitution Treatment project were introduced within the framework of the National Programme to Fight Against Drugs.

Although the infrastructure of elderly care improved from 195 beds in 1998 to 263 beds in three geriatric institutes and another 856 beds in 21 geriatric departments within hospitals in 2002, it is still not sufficient. Community care has been improved by the introduction of home care agencies that increased from 2 in 1997 to 173 by the end of 2003. Community and home care for the elderly and disabled is supported by the legislation that provides social benefits to the carers of those with disabilities. These forms of community care are increasing. In 1994 the Ministry of Health ran 8 institutions for infants, 12 children's homes and 20 homes for infants. Although transferred to the responsibility of the Ministry of Labour, Social Affairs and the Family, most of these were passed on to the regional state administration authorities. Many institutes for community care were passed to municipalities and are under mixed ownership.

Within the framework of the social system there are homes for adults with physical disabilities; adults with both physical disabilities and learning difficulties; persons with impaired senses; and adults with learning difficulties. In 2002 there were 98 with 8330 places. There are also homes for young people with physical disabilities; young people with both physical and learning difficulties; young people with learning difficulties; and young people with impaired senses. In 65 institutions the capacity was 3749 in 2002. There are also 252 social care institutions with 16 202 places. In summary, the institution-based capacities for social care increased between 1999 and 2002. About 1500 acute beds were transformed into social care and another 1000 hospital beds were transformed into long-term inpatient care.

Home care agencies have been promoted since the end of the 1990s. Community-based projects, such as those for harm reduction in drug users, were introduced in recent years. However, home care and community-based services still face financial and legislative hurdles to developing in a way that is appropriate to the changing care priorities and needs of the population. To support the efforts of community care development, the recent amendment of the Act on Health Care Delivery defined the concept of nursing care as a

subcategory of health care. This plan has already stimulated growth of home and community care that is delivered mostly by qualified nurses.

Human resources and training

In 2002 5.5 % of all employees worked in the health sector *(4)*. Of the 113 734 persons working in health care, two thirds were employed in state facilities and one third worked in private settings.

Table 18 shows the trends in human resources in health care over the past two decades. Data are presented in full-time equivalents but are similar to physical persons since most personnel work full- time. While the number of physicians increased throughout the 1990s (Fig. 12), the number of nurses remained fairly constant (Fig. 13). Between 2000 and 2002 the number of nurses decreased from 39 973 to 38 066, nearly 5%. These reductions in health staff have resulted mainly from considerable restructuring of health care facilities as well as the migration of health care workers, especially to the neighbouring Czech Republic.

In comparison to other European countries, the number of nurses (7.1) ranked below the EU-10 average in 2002 (8.1 per 1000) but above that of the EU-15 average (6.8, data for 2000). In contrast, the density of active physicians (3.2 per 1000) was above the EU-10 average (2.7) and below the EU-15 average (3.5 per 1000, data for 2001).

Of 16 897 physicians (expressed in full-time equivalents) practising in 2002, only 6452 (38%) worked in primary care for adults or children, as gynaecologists or dentists (see *Primary and secondary outpatient care*).

In 2002 several acts on health occupations and government regulations on the qualifications of health care workers and continuous education of health care workers were adopted. This new legal regulation of postgraduate and continuous training of health personnel was amended according to the approximation of EU

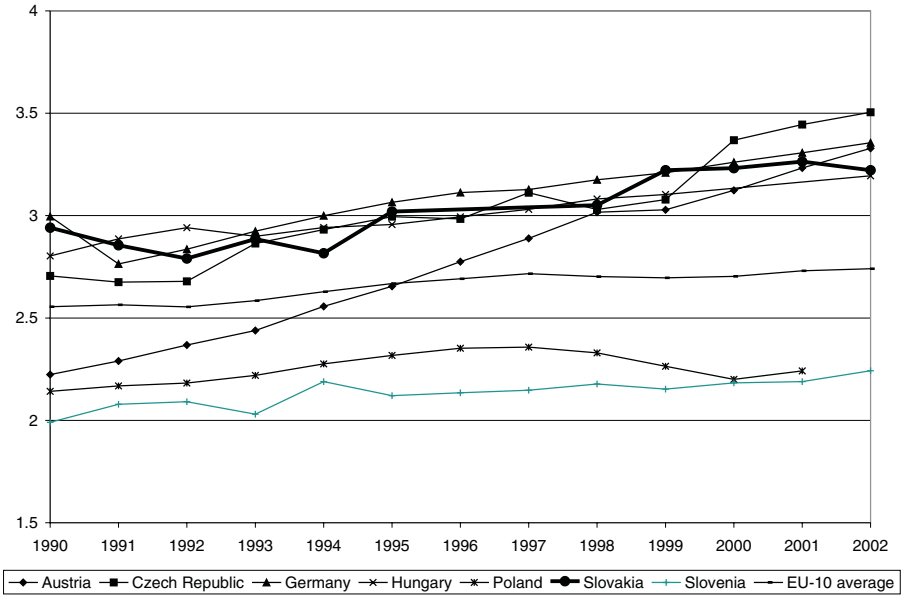
Table 18. Development of the number of active health personnel, 1980–2002

Personnel	1980	1985	1990	1995	1999	2000	2001	2002
Physicians – FTE	14 107	16 205	17 247	16 565	18 268	16 387	17 048	16 897
Dentists – FTE	2 252	2 540	2 574	2 136	2 622	2 702	2 339	2 335
Certified nurses – FTE	29 760	34 878	37 127	37 655	38 708	39 973	38 969	38 066
Midwives	2 272	2 386	2 567	2 098	2 202	–	–	1 087
Pharmacists	1 638	1 893	2 050	496	2 098	2 245	2 605	2 728
Physicians graduating	683	462	404	699	592	582	529	534
Nurses graduating	1 973	2 335	2 171	4 115	3 007	2 904	2 664	2 785

Source: Institute for Health Information and Statistics, 1999 *(28)*; WHO Regional Office for Europe health for all database, June 2004.

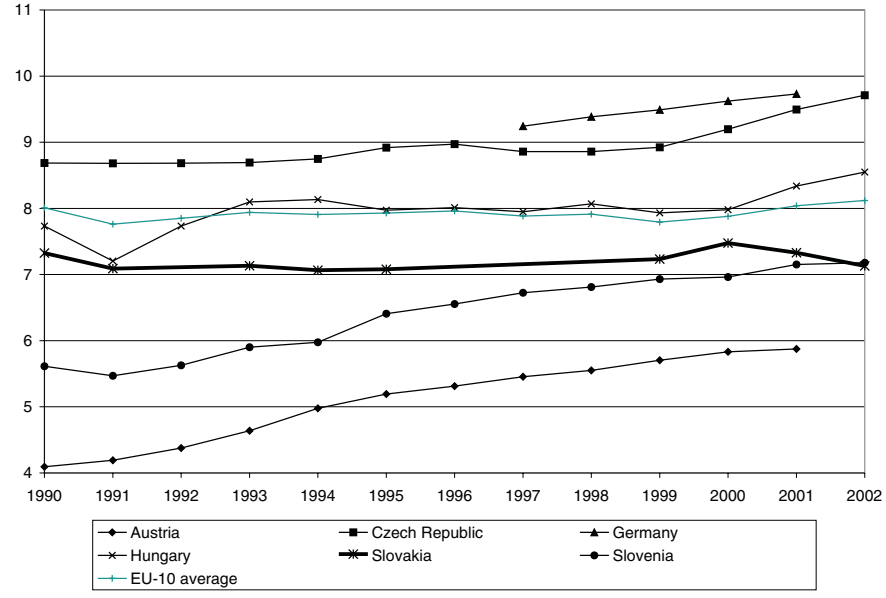
Note: FTE: full-time equivalents; other figures relate to physical persons.

Fig. 12. Physicians per 1000 population in Slovakia, selected countries and EU-10 average, 1990–2002



Source: WHO Regional Office for Europe health for all database, June 2004.

Fig. 13. Nurses per 1000 population in Slovakia, selected countries and EU-10 average, 1990–2002



Source: WHO Regional Office for Europe health for all database, June 2004.

law in 2003 and early 2004. Physicians' undergraduate education is provided in three medical faculties: in Bratislava (western Slovakia), Kosice (eastern Slovakia) and Martin (central Slovakia). As independent institutions affiliated to the universities they did not coordinate admission to their medical faculties with health sector needs. In 1997 it seemed that the number of medical students was decreasing continually as 3785 were attending the 3 medical faculties (from 4304 in 1994), but inadequate regulation led to the admission of 4802 students in 2002. Even a substantial decrease in the number of new students admitted, 1824 in 2002, will not produce fewer graduates until 2008.

Until 1991 there were four different kinds of medical graduates: general physicians, dentists, paediatricians and hygiene specialists. Since then there has been a single medical degree in general medicine and a dental degree, accompanied by a revised undergraduate medical curriculum. However, the concept of the family doctor as a basis for the undergraduate training of primary health care physicians has not been introduced yet. In 2002, 487 students graduated in general medicine and 47 in dentistry.

Until recently, nurses and other paramedical personnel graduated from 31 secondary nursing schools spread throughout Slovakia. Most of the secondary nursing schools were financed and regulated as budgetary organizations by the Ministry of Health but recently these were transferred to the local self-governing administrations. Responsibility for seven secondary health schools was passed to religious organizations (churches) as contributory organizations partly supported by the state and where the study is free of charge. Graduates comprise general nurses, children's nurses, dietitians and nutrition assistants, laboratory technicians, pharmaceutical laboratory technicians, dental laboratory technicians, radiographers, physiotherapists, opticians and orthopaedic technicians. In 2002 8859 students were attending the secondary nursing schools, compared to 9452 in 1997 and 14 237 in 1994. The secondary nursing schools produced 2490 graduates (not including evening school students) in 2002, of whom there were for example 1366 general nurses, 61 nutrition assistants, 127 medical laboratory assistants, 129 pharmaceutical laboratory assistants, 13 orthopaedic technicians and 38 dental laboratory technicians.

The lower number of nursing students may also result from the changes in 2000: nurses' training at secondary school level was terminated and incorporated exclusively into the system of higher education. In 2003, 9 universities provided training for nurses and midwives. Currently, nurses qualify by graduating from one of three courses: a 3-year higher specialist training, a 3-year bachelor's or a 5-year master's degree at university. Since 2002, midwives have trained on specialist bachelor's degrees at universities only. Between 1998 and 2002 74 nurses obtained bachelor's degrees, 96 obtained master's degrees. All training programmes for nurses now meet the minimum requirements of the relevant

EU directives. The number of graduates to date is 690 nurses per 100 000 and 20.12 midwives per 100 000. In 2002 adoption of Act No. 311/2002 paved the way for the establishment of the separate Slovak Chamber of Nurses and Midwives and laid out the main professional, ethical and regulatory principles of their work.

The Slovak Medical University (Slovenska zdravotnicka univerzita) currently provides all further education for health care workers in the form of specialized study, certification training, innovative courses, health management training, etc. Physicians, dentists and pharmacists study on 3–5-year specialization programmes for particular medical specialties compliant with the EU requirements. The legislation adopted in 2003 paved the way to include all other Slovak medical faculties in the process of further education and training.

Pharmaceuticals and health technology assessment

In 2002 the supply of drugs and medical devices for health care facilities and inhabitants was guaranteed by 1164 public pharmacies, 84 hospital pharmacies and 81 facilities providing medical devices. Privatization led to a growth in the number of public pharmacies from 500 in 1993 to 1164 in 2002. Hospital pharmacies are operated directly by the hospitals so ownership depends on the status of the hospital (see *Planning, regulation and management*). In 1990 there was only one state wholesaler (MEDIKA). By 1997 when the Ministry of Health carried out a thorough control, there were more than 260 but now their number has declined to 36. They are obliged to supply required drugs within 24 hours.

The drug market has changed substantially since 1989. Previously, domestic production accounted for about 80% of drug consumption in Slovakia but this fell to 18% in 2002. The biggest pharmaceutical plant is Zentiva/Slovakofarma in Hlohovec that produces generic drugs, particularly for cardiovascular and gastric diseases, and analgesics (opium alcaloids). The private enterprise Imuna-Pharm in Sarisske Michalany produces blood derivates, physiological infusions, some vaccines, etc. Over recent years, 12 other private companies for mass drug production have been established in Slovakia.

In 1998 Act No. 140/1998 on Drugs and Medical Devices was adopted to meet the European Union's requirements for drug legislation. This act establishes the basis for a new system of drug registration and control over the production, distribution and sale of drugs etc. It was amended in 1999, 2000,

2001 and again in December 2003. The State Institute for Drug Control executes many tasks laid down in the act.

Managing solutions for drug policy has proved to be one of the most difficult of the health care reforms in Slovakia. In particular, difficulties with drug volumes and prices have led to problems in overall health care financing. In 2002 total per-capita expenditures on pharmaceuticals in outpatient care accounted for US $232 PPP, lower than in the Czech Republic (242), Hungary (280) or Germany (402) but higher than in Denmark (223) or Greece (211) for example. However, Slovakia spent 34% of its total health expenditures on pharmaceuticals, the highest share among all OECD countries. Of this 34% public sources covered 28% and private sources 6% *(4)*. Health insurance funds spent nearly 40% of their expenditures on pharmaceuticals in 2003 *(13)*.

Expenditures on drugs have grown rapidly since 1991. One reason for this was that Slovakia was originally one of the countries in which drugs were practically free of charge. This led doctors to over-prescribe drugs and encouraged the population's growing demand for the most modern and often the most expensive drugs. Intensive marketing campaigns by pharmaceutical companies in a new market environment fostered this development, often via health care providers and forms of hidden advertising. It must be noted that the number of prescriptions for drugs in outpatient care has decreased since 1998 (Table 18).

Despite the introduction of a mandatory health insurance system the situation has not improved. On the contrary, a very liberal system of drug regulation led to a rapid growth in health insurance companies' expenditures on outpatient drugs. While these accounted for 3.3 billion Czechoslovak koruny (CSK) in 1991 and CSK 4.5 billion in 1992, health insurance company expenditure for prescription drugs in the autonomous Slovakia increased from SKK 8.3 billion in 1994 to SKK 11.8 billion in 1995, SKK 19.7 billion in 2002 and reached SKK 21.0 billion in 2003. Since the number of prescriptions decreased during this period the increase in expenditures was rather due to three other reasons: physicians prescribing other, more costly medications (structural component), bigger packages or higher doses (quantitative component) and/or to an increase of prices for established medications (price component). Expenditures on pharmaceuticals in inpatient care are included in figures on hospital expenditures. In 2003, approximately SKK 2 billions were spent on drugs in hospitals, that is about 10% of the costs occuring in the ambulatory sector.

Since the adoption of the Act on Treatment Code in 1995, pharmaceuticals registered for the Slovakian market are no longer automatically fully reimbursed by health insurance companies. As an appendix of this law a drug list was issued as a result of a process called "categorization of drugs" performed by a

special committee of the Ministry of Health. The drugs are grouped according to anatomic-therapeutic-chemical classification (ATC groups). All registered drugs in the groups were divided into three categories The first category contains essential drugs fully covered by mandatory health insurance. The second category (mostly patented equivalents or generics produced by different manufacturers) is partially reimbursed. Those in the third category, mainly vitamins and minerals, were included in a negative list and have to be paid out of pocket.

In 1995, for example, some 9750 drugs were available on the national market. The Ministry of Finance had approved maximum prices for about 5000 of these (see *Planning, regulation and management*). Of these, 40% were classified in the first category, 27% in the second category and only 9% of drugs were not reimbursed at all. The remaining 24% were drugs used exclusively in inpatient facilities, where all are fully reimbursed. This categorization process, based on reference reimbursement, was repeated regularly during the following years.

Several amendments to the Act on the Treatment Code have made the process of issuing an updated drug list more flexible; currently issued as a ministerial decree rather than as an appendix to the Treatment Code. However, as the categorization committee consisted mostly of medical professionals, it proved vulnerable to the aggressive marketing activities of the drug producers and suppliers. Another weakness has been that the patient co-payment was dependent on the pricing of the drug. Suppliers learned to reduce the price according to the issued drug list and thereby eliminate the patient co-payment. Often this resulted in a dramatic reduction of the number of drugs that had been classified for partial reimbursement and co-payments, once the patient co-payment was eliminated the suppliers promoted prescriptions of higher dosage and/or amounts than before.

The categorization of drugs as a stand-alone measure was not enough to prevent the escalation of drug costs, therefore several other measures to gain control of drug expenditure were applied during the reforms. In 1996 inpatient drug formularies were introduced and a positive list for outpatient providers was produced in 1998. However, these were not supported by the existing legislation and, due to extreme resistance from the providers, had to be abolished.

In June 2003, legal amendments dramatically changed the drugs categorization system. The number of ATC groups in which at least one drug has to be fully reimbursed by law decreased to 122. A special ministry department performs price negotiations. The composition of the categorization committee was changed, with greater participation of health insurance companies' representatives and a higher emphasis on cost-effectiveness analysis. A constant patient co-payment system was introduced. If the price of a drug is reduced

after the publication of a drug list, the insurance companies benefit from a lower reimbursement. Currently, the drug categorization process is in full compliance with EU Directive No. 89/105/EEC, using objective and evidence-based criteria that are listed in the current version of the Act on the Treatment Code. Applications for inclusion on the list of drugs reimbursed from mandatory health insurance are dealt with within 90 days.

At the same time the legislation introduced spending caps for drugs and medical goods at individual provider level. As part of their contracts with health care providers, health insurance companies must negotiate monthly or quarterly prescription limits; specify the feedback at individual provider level; and positive and negative incentives for the individual provider. Individual providers are limited by the approved budgets of the respective health insurance companies that have imposed strict prescription constraints on physicians since 1 July 2003. In combination with the marginal fixed co-payments for dispensing drugs in pharmacies and during outpatient visits, these measures have led to a slowdown in the growth of drug expenditure during the second half of 2003, the first for a long time.

Drug expenditures increased substantially throughout the last decade, yet the annual growth rate has been reduced from 17% per year in 2002 to about 7% in 2003. Another challenge remaining is educating the population on drug consumption. Since January 2004 the Ministry on Health has had the competence to set the maximum prices of drugs (see also *Planning, regulation and management*). This process is in concordance with EU Council Directive EU 89/105/EEC relating to the transparency of price measures for drugs and their inclusion in national health insurance systems.

Expenditure on medical devices increased from 2.6% of total health expenditure in 1999 to 4.8% in 2001. About half of expenditures were financed by public sources, half by out-of-pocket payments *(4)*. Since mid 2003 health insurance companies also have negotiated monthly or quarterly prescription

Table 19. Pharmaceutical expenditures and prescriptions, 1998–2003

Personnel	1998	1999	2000	2001	2002	2003
Expenditure on drugs (in SKK billion)	12.0	12.5	15.4	16.9	19.7	21.0
Number of prescribed packages (in thousands)	115.3	95.5	98.4	97.6	96.0	92.8

Source: Ministry of Health of the Slovak Republic, 2004 *(30)*.

limits for medical devices with individual providers as part of their contract. In the early 1990s a massive purchase of medical technology, mainly through leases or as gifts, provoked increased costs in hospital care. Having acquired high-technology equipment, often hospitals struggled to finance its operation. Table 20 shows the substantial increase in high diagnostic and therapeutic technologies at the beginning of the 1990s and the ongoing growth since 1995. The documented density of technologies is higher than in Poland but lower than in the Czech Republic, Hungary or western European countries (with few exceptions e.g. lithotriptors) *(4)*. However, an inventory of high-technology equipment showed low utilization of the technology and hence high operation costs in some cases *(20)*.

Table 20. High medical technologies, 1985–2002, selected years

	1985	1991	1993	1995	1997	1999	2001	2002
Number of technologies								
Computer tomography scanners	2	7	14	26	38	44	46	57
Magnet resonance tomography units	0	0	0	2	5	7	7	11
Radiation therapy equipment	12	16	27	41	49	58	59	71
Lithotriptors	12	25	28	33	43	53	52	78
Hemodialysis stations	1	64	98	210	260	250	267	510
Mammographs	3	8	13	31	48	43	50	65
Per million population								
Computer tomography scanners	0.4	1.3	2.6	4.8	7.1	8.2	8.5	10.6
Magnet resonance tomography units	0	0	0	0.4	0.9	1.3	1.3	2.0
Radiation therapy equipment	2.3	3.0	5.1	7.6	9.1	10.7	10.9	13.2
Lithotriptors	2.3	4.7	5.3	6.2	8.0	9.8	9.6	14.5
Hemodialysis stations	0.2	12.1	18.4	39.2	48.3	46.3	49.5	94.8
Mammographs	0.6	1.5	2.4	5.8	8.9	8.0	9.3	12.1

Source: OECD Health Data 2004 *(4)*.

Financial resource allocation

This section focuses on the processes by which financial resources flow from the health insurance companies to the health care providers. The health insurance companies administer mandatory contributions, collected directly from insured persons, and the budgetary transfer from the state on behalf of the rest of the mandatory insured (see *Health care financing and expenditure*). Health care provision is covered mainly from these sources. The health insurance companies do not cover directly the capital investments of the health care providers. Health insurance is regulated mainly by the Act on Health Insurance and the Act on the Treatment Code (see *Planning, regulation and management*).

Third-party budget setting and resource allocation

The health insurance companies represent third-party payers. There are five insurance companies all of which are legal public bodies. Individual insurance companies have no defined geographical areas to cover and locate their offices according to their actual needs. The companies contract with individual health care providers, the contracts are independent and one health care provider may contract with all five health insurance companies and vice versa. The health insurance companies reimburse services delivered by both the state and private health care providers. There is no separate system to cover private health care providers.

Fig. 14 gives an overview of the flow of finance in Slovak health care. The main sources of finance for the health insurance system are the contributions collected from employed and self-employed persons and from the state transfer on behalf of the rest of the population (see *Main source of finance*). The state

allocation is approved annually 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 also are approved by the parliament. Three other health insurance companies approve their budgets through their own internal regulatory mechanisms.

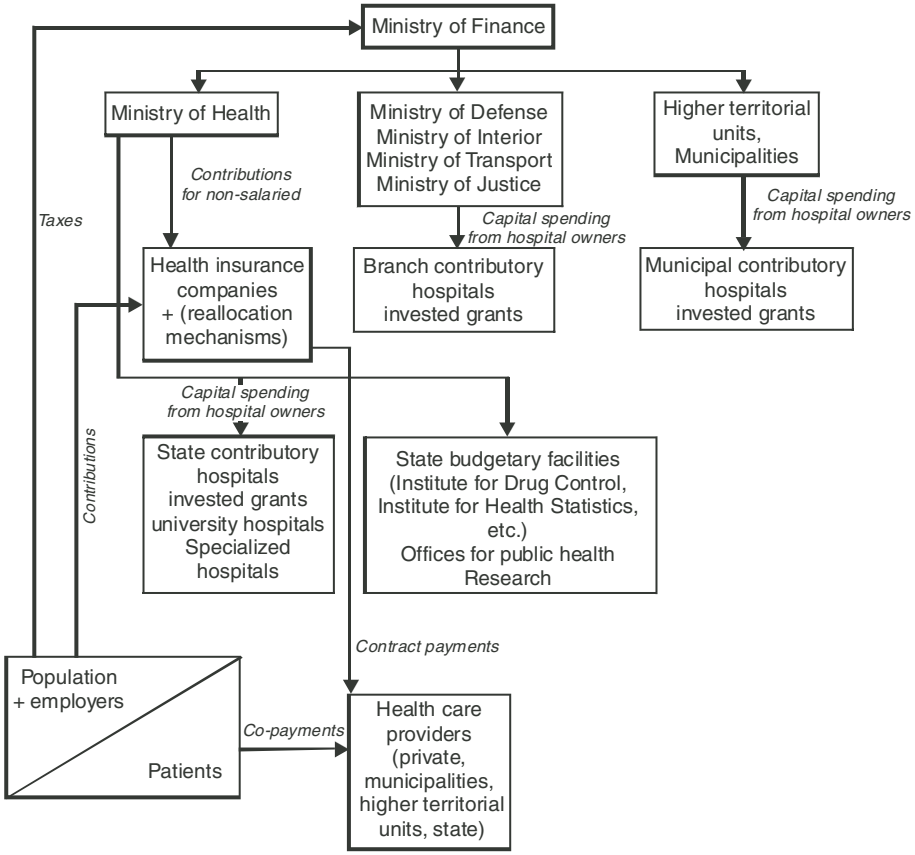
Until the late 1990s the allocations to different programmes such as primary health care, outpatient specialist care, inpatient care and drugs were based on the health care services provided and the invoices submitted. Due to uncontrolled growth in some of these, in 1997 the Ministry of Health agreed with the health insurance companies to define an oriented distribution of the resources to each programme. However, this was not pursued.

The structure of resource allocation is determined in the budgets of the individual health insurance companies. The amount of money allocated to each health care provider is negotiated in the contract. The negotiation role between provider and health insurance company has been strengthened further by the amendments to the Act on Health Care Delivery in June 2003. According to these the health insurance company must negotiate the amount of services to be delivered, as well as the monthly or quarterly prescription limits for drugs and medical devices, and include these in their contracts with individual providers. The health insurance company also must specify the monitoring mechanisms and sanctions if the negotiated amounts are exceeded.

Since January 2004 the reimbursement systems have been prepared and issued in decrees from the Ministry of Health. Health insurance companies are consulted during the preparation process but the competence to regulate this matter belongs to the Ministry of Health.

The main controversy about the system seems to stem from the serious discrepancy between the resources available for health care provision reimbursement and the costs that the individual providers accrue during the process of health care delivery. The health insurance companies are often not able to cover on time what was contracted, and end up with delayed payments towards the providers, which in turn accumulate debts towards their suppliers. During 2003 this problem was partially solved. At the same time most inpatient care providers have higher costs than the amounts they are able to negotiate with the health insurance companies, this results in increased indebtedness to their suppliers, health and social insurance funds, etc. Some improvements were observed in 2003 (see *Planning, regulation and management*) but this remains an unsolved issue.

Fig. 14. Financial flow chart, 2004



Payment of hospitals

Since the introduction of the health insurance scheme, hospitals' payment methods have changed several times, mostly reflecting changes in government. In 1993 the fee-for-service based points system of the German ambulatory care sector was introduced for inpatient care in Slovakia (see the HiT on Germany for details of this "Uniform Value Scale"). One advantage of this system was that it generated hospital activity data that enabled hospital services to be measured and 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.

From July 1994 the performance-based system was used, with hospitals reimbursed for bed-days. A daily charge for a bed-day was defined for each of the five hospital types, increasing from the first to the fifth. The rates were defined after negotiations between the Ministry of Health, the Ministry of Finance, health insurance companies and hospitals. The Ministry of Finance then issued a decree on bed-day prices and hospitals invoiced the health insurance companies for their services.

Following the 1995 amendment to the Act on Health Insurance, insurers had to pay hospitals 80% of the estimated costs in advance and settle the final account within four months. However, this was not completely enforced in practice. Charges were fixed, independent of the length of stay or diagnosis, so hospitals treating the long-term ill in acute medical wards benefited while those providing mainly surgery or intensive care fell into debt. This system also encouraged hospitals to prolong stays. In addition, bed-day prices did not cover the real costs of hospitals and may have led to a decline in the quality of care. According to some calculations, the costs exceeded the prices paid by the health insurance companies by up to 30%.

In 1999 the retrospective system of payment for hospital services was replaced by a system of prospective total budgets for hospitals. The Ministry of Health based these calculations mainly on historical costs although other indicators were considered. The prospective budget was divided among the different health insurance companies based on the number of insured persons treated in a given hospital in the previous months and on the volume of services provided to the insured. While this contained the expenditures of health insurers, unstructured contracts encouraged health care providers to choose priorities that frequently did not correspond with overall health policy goals. Due to some perverse incentives they also made efforts to minimize their delivery of services in order to achieve cost savings. In addition, the health insurance companies delayed reimbursements that did not cover all the health services delivered and growing demand and prices of supplies, etc. led to poor financial performance in most hospitals. Some debts exceeded SKK 100 million. By 30 June 1999 the health care facilities' debts had reached SKK 9.9 billion although they, in turn, were owed SKK 6.4 billion by the health insurance companies.

In response to this situation, in December 2001 a new reimbursement mechanism was introduced. This system, which could be described as a broadband form of diagnosis-related groups (DRGs), was based on a fee for inpatient care delivered with payments classified according to the type of hospital and specialty (Fig. 14). Health insurance companies were obliged to have structured contracts with health care providers and to monitor their performance. The new system included incentives for shortening the average

length of hospital stay as well as certain stimuli to implement day-treatment procedures, some of which were reimbursed on a fee-for-service basis.

Nonetheless, insufficient resources to cover fully the generous scope of services, financial limitations in the contracts with health care providers and the debts outstanding from the health insurance companies resulted in health care providers' arrears reaching SKK 16.2 billion in 2003 *(20)*.

Payment of physicians

Physicians in hospitals and outpatient clinics are state-employed and salaried according to national pay scales. Private physicians in primary and secondary care have direct contracts with health insurance companies (Fig. 14). During the last decade, however, the system of reimbursement for primary care physicians has changed several times.

In 1993 a points system was introduced for both outpatient and inpatient care (see above). This was replaced with a 100% capitation system in October 1994 although dentists chose to continue with the points system. In 1998, based on Act No 98/1995 on the Treatment Code, a "combined system" was introduced – a combination of 60% capitation payments and 40% by the points based fee-for-service system. Dentists continued to be paid exclusively on a fee-for-service points basis. Privately contracted doctors were able to multiply the price for each point by an index and this facilitated the start of private practices. Private physicians pay salaries to their nurses or other staff and rent rooms and equipment, mostly in the premises of stand-alone polyclinics and less often in hospitals. Rental charges were limited to a maximum of SKK 250 per square metre per year until early 2003. Recently the rental charges were stepwise increased to a maximum of SKK 1500 per square metre, reaching the market price in most locations. It remains to be seen whether such a regulation will increase the number of moves to private premises.

The system of primary health care reimbursement was considered satisfactory as it was expected to allow physicians in private practice to earn according to their skills and effectiveness (a type of performance-related system). However, in 1998 the new government declared this system of open-ended financing to be unsustainable and restored the 100% capitation payment. Capitation rates were set by the Ministry of Health and issued by the Ministry of Finance. The maximum rates varied between GPs for children and adolescents and those for adults and gynaecologists but did not differentiate by age, region or any other variable. In 2001, alongside the age-structured capitation, a fee-for-service

payment for preventive care was introduced as an incentive for primary care physicians reimbursed by capitation to provide preventive care. Minimum and maximum capitation rates were set but individual health insurance companies' rates mostly hover around the minimum.

For private office-based specialists, outpatient care services are reimbursed according to a fee-for-service principle (points basis). Health insurance companies generallly set an upper limit on the volumes of services they will reimburse. State specialists, together with nurses and other health personnel employed by the respective health care facilities, are salaried in accordance with the national pay scales. In this case, a health care facility receives the payment as a points-related lump sum from the insurer.

The average monthly income of physicians in the state-owned health care facilities directly managed by the Ministry of Health increased by about 49%, from SKK 19 457 in 1998 to SKK 28 973 in 2003. Similarly, nurses' income increased by 46%, from SKK 9325 in 1998 to SKK 13 635 in 2003. Over the same period, the average monthly income in the Slovak Republic increased slightly less at 43%, from SKK 9593 in 1998 to SKK 14 152 in 2003 *(30)*. Valid data on the average income of physicians and nurses in private practice are not available, however, it is estimated that the initial difference in favour of private health care providers has diminished in recent years. In some instances salaried health care professionals appear to have higher incomes than their colleagues in private practice.

As discussed above, the average income of salaried health professionals has grown at a similar rate to the average income of the employed population. Health professionals seem to perceive this as unsatisfactory and demotivating. If not addressed, the expectation of higher incomes in other EU Member States may be an incentive for Slovak health professionals to search for employment outside the country. However, the decision to leave may be influenced by many other factors and the incentive of a higher income probably should not be overestimated in this context.

Health care reforms

Aims and objectives

The early health care reforms in the Slovak Republic were initiated by the radical political, social and economic changes following the velvet revolution in 1989. They were influenced by the overall desire to move towards a democratic society with a social market-oriented economy. There was a strong political decision to replace the socialist health system (Semashko) with a mandatory statutory health insurance system including an organizational split of purchasers and providers, acting in a specifically regulated market. Until recently medical doctors mainly have driven the process of reform within the health sector by pushing the Ministry of Health.

In 1990 the government adopted the document *Reform of structure, management and financing of health care (31)*. This identified a number of drawbacks in the centrally-planned socialist health system and the overall system of structure, management and financing was declared unsustainable. 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 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 health care providers.
- To remove dependence on one source of financing and to renew the interdependence of health and economic management.
- To improve curative and preventive care and its material and technical basis.

- To renew citizens' positive attitudes towards their own health.
- To introduce free choice of health care providers.
- To improve the social status of health professionals through the introduction of a reward system based on performance, to ensure their high morale and responsibility for health care provision, which should be monitored by thorough state control with the cooperation of the medical chamber and other professional organizations, etc.

Different priorities were emphasized as governments changed, but the main strategies – health care financing through health insurance, as well as privatization and decentralization of the health service provision – have not changed. Today after nearly 15 years of reforms the health system still has not reached all its goals. On the contrary, it has struggled with frequent changes and a discrepancy between the generous scope of services to be covered by health insurance and the lack of financial resources. Indeed, growing debts have lead to widespread doubts about whether the system is financially or managerially sustainable in its current form.

Content of reforms

Health for all policy

In 1991 the Slovak Government, and in 1992 the Slovak National Council, adopted the National Health Promotion Programme based on the health for all strategy. In addition the State Health Fund and the National Health Promotion Centre were founded. The Coordination Board of Ministers was established to coordinate the implementation of the National Health Promotion Programme but this was not implemented, mainly due to a lack of financial resources and an absence of shared commitment from other sectors. In 1994 and 1995, the State Health Policy based on the World Health Organization's (WHO) health for all policy laid down the basis for further elaboration in 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 in 1995 *(32)*, the health policy document *Continuing transformation of the health sector and principles of public health policy* in 1996 *(33)* and the National Action Programme on Environment and Health in 1997 *(34)*. *Continuing transformation* was replaced in 1999 by the new health policy document *Transformation steps*

in the health sector for 1999–2002 (11). This was based on the principles of the WHO's *Health for all for in the 21st century*.

The 1990–2002 reforms

In 1991 the Regional and District National Institutes of Health were abolished. This led 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 to Act No. 20/1966 enabled privatization of the health care facilities. In 1992 the Institute for the Introduction of the Health Insurance Plan was established in order 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 mandatory health insurance.

During the health care reforms that followed, a number of legislative norms were adopted to enforce these rights. First, in 1993 the insurance scheme began. Initially 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 subsequently was changed twice, finally resulting in a capitation system for outpatient care and bed-day reimbursement for hospitals.

In December 1994 a new government approved a document on updating the privatization process in the health sector. This led to the privatization of all pharmacies (excluding hospital pharmacies) and primary health care was privatized by the end of 1996. Private physicians' higher incomes led to some shift from inpatient secondary health care to primary care and re-training was provided to facilitate this process. By 1997 almost all spa facilities had been privatized and the privatization of outpatient specialist care began. In 1995 the new government adopted the health policy document *Continuing transformation of the health sector (33)*. This detailed the priorities and tasks laid down in the Government proclamation. The main emphasis was placed on improving the health status of the population and the quality and effectiveness of health care provision through competition among health care providers. Upper limits were introduced in order to avoid uncontrolled increases in costs (e.g. numbers of investigations, referrals and prescriptions).

In 1996 a health policy document was submitted to parliament to propose methods for containing costs and improving the financial situation in the health sector *(35)*. In 1996, the government approved the *Concept of drug policy (36)*. This dealt with the principles of drug legislation, drug registration and approval of medical devices, categorization, rational pharmacotherapy, domestic pharmaceutical research and the pharmaceutical industry, quality and safety of drugs, their supply and access, the monitoring of drug consumption, drug pricing, health education and information on drugs, and the 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 (37)*. In its policy statement in December 1998 the new government committed itself to ensuring universal access to good quality outpatient and inpatient care and to controlling and containing health care costs. It stated that these goals could be only achieved by a fast and well prepared comprehensive reform. Nonetheless, universal access to the generous scope of free of charge services, as guaranteed by the Constitution, proved to be unsustainable financially.

The lack of appropriate control and regulatory mechanisms during the early stages of the health care transformation between 1993 and 1999 resulted in a proliferation of inpatient services and shift towards over-specialization. These trends were constrained substantially by the adoption of the document *Optimum network of health care facilities in the Slovak Republic (27)* and subsequent rationing and restructuring of the existing inpatient capacities between 1999 and 2002, but the failure to address the basic causes of the unsustainable financial situation resulted in ongoing accumulation of debts. For further details on the content of the recent reforms, see also the section on *Planning, regulation and management* and subsequent chapters. Below, all major acts are presented in the order in which they were passed during the course of early reforms:

- 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 been used yet.
- Act No. 92/1991 on Conditions of Transition of State Property to Other Bodies: through later amendments enabled privatization of health care facilities.
- • 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 implementation of financing for mandatory health, sickness and pension insurance. The National Insurance Agency in turn created the health, sickness and pension insurance funds for each separate kind of insurance.

- 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. Also it defined the personal scope and limits of health insurance and the framework of necessary health care.
- Decree No. 220/1993 on Promulgating the Treatment Code: regulated the system, scope and conditions for the provision of necessary health care financed by the Health Insurance Fund.
- 1993 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: regulated the health providers' reimbursement by the National Insurance Company and regional insurance companies. Conditions for reimbursement were outlined in two lists attached to the notice - the List of Health Services and the Lists of Drugs, Medical Devices and Medical Supplies. Stated that the reimbursement of health services was to be carried out on the basis of a "points" evaluation and provided the maximum price per point. The Ministry of Finance issued the prices of drugs, medical aids and medical supplies .
- 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.
- Decree No. 18/1994 on Promulgating the Treatment Code of the Ministry of Interior Insurance Company: regulated in detail the conditions and scope for the provision of health care financed by the Ministry of the Interior Insurance Company.
- Act No. 92/1994 on the Military Health Insurance Company: established the position and tasks of the Military Medical Insurance Company. The Treatment Code also was passed for this insurance company.
- Act No. 201/1994 on Health Insurance of Railway Workers and on the Railway Health Insurance Company: regulated the health insurance of railway employees and established the Railway Health Insurance Company, its organization, activities and financing.
- Act No 272/1994 on Health Protection of People: introduced basic terms such as "health", "health protection", "healthy living and working environments".

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 the chief hygienist, district and sub-district hygienists.

- Act No. 273/1994 on Health Insurance, on Financing Health Insurance, on Establishment of the General Health Insurance Company and on Establishment of the Sector, Branch, Enterprise and Civil Health Insurance Companies: regulates health insurance, established branch, enterprise and civil health insurance companies and their organization and financing. Abolished Acts No. 7/1993 and No. 9/1993 and their respective regulations.
- Act No. 277/1994 on Health Care: lays down the conditions for health provision, the 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 that 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. Regulates conditions for the provision of specialized health care such as transplantation, sterilization or artificial fertilization and health care provision in non-state health establishments and spas. Regulates springs and mineral drinking-waters and introduces sanctions for breaches of measures for the protection of natural curative springs. Defines health care provision, its organization and the rights and duties of individuals and statutory bodies in ensuring this care.
- Act No. 98/1995 on the Treatment Code: regulates conditions governing the provision of health care and medical aids through health insurance, on co-payment or full payment.
- 1 November 1995 the amendment to Act No. 273/1994 came into force. This defined stricter conditions for the redistribution of mandatory contributions between health insurance companies and introduced more rigorous conditions for the establishment and operation of health insurance companies. Other amendments redefined state control's role in the health insurance plan. This amendment led to a decrease in the number of health insurance companies.
- 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 close cooperation with the health services.

- Act No. 222/1996 on Organization of Local State Administration: changed the organization of state health administration. Existing sub-district state physicians and hygienists were replaced by district state physicians and hygienists, existing district state physicians and hygienists were replaced by regional state physicians and hygienists. 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 contradict other legislation.
- Act No. 67/1997 on Protection of Non-Smokers: laid down a basis for better prevention and control of smoking. Forbids smoking in public premises, health care facilities and schools as well as any form of advertisement for tobacco products.
- Act No. 202/1997 amended the Act on Health Insurance concerning the redistribution mechanism of the health insurance contributions.
- Act No. 251/1997 amended Act No. 98/1995 on the Treatment Code and introduced a more flexible method of categorizing newly registered drugs and medical aids based on ATC classification.
- Act No. 280/1997 on the Common Health Insurance Company created a legal basis for the merger of the Health Insurance Company of the Ministry of Interior, Railway Health Insurance Company and the Military Health Insurance Company, which had been regulated by separate acts.
- Act No. 332/1997: another amendment of the Act on the Treatment Code. This excluded some procedures from the mandatory health insurance and adjusted the reimbursement of some diagnostic procedures.
- Act No. 124/1998: amended the Act on Health Insurance concerning redistribution mechanisms in the risk adjustment scheme among health insurance companies and the introduction of a central registry of insureds at the Ministry of Health.
- Act No. 139/1998 on Narcotic Substances, Psychotropic Substances and Agents: regulated the misuse of the listed substances and harmonized this policy area with international norms.
- Act No. 140/1998 on Drugs and Medical Devices was the first act in this area. In accordance with EU legislation it regulates the process of manipulation of drugs and medical devices, their testing, registration of drugs, approval of medical devices, ensuring control of quality, efficiency and safety and the related tasks of the state administration. Manipulation covers the production

of pharmaceuticals, wholesaling and provision of pharmaceutical services in the pharmacies and in other facilities. The act stipulates that only pharmacists can own pharmacies.

- Act No. 239/1998 amended further the Act on Health Insurance.
- Act No. 241/1998 amended the Act on Health Care Delivery.
- Edict No. 274/1998 of the Ministry of Health: regulates good production practice and good wholesale practice to meet the requirements of the Pharmaceutical Inspection Convention.
- Notice of the Ministry of Health No. 275/1998 on pharmaceutical testing and toxico-pharmaceutical testing. This accompanied Edict No. 274/1998.
- Act No. 303/1998: amended the Act on Health Care Delivery to adjust the obligations of non-state health care providers, including reporting and other areas.
- Act No. 11/1999 amended further the Act on Health Insurance concerning the self-governmental bodies.
- Act No. 56/1999 amended further the Act on Health Insurance, this time the assessment basis for the calculation of contributions.
- Act No. 151/1999 was a further amendment of the Act on Health Insurance. It changed the redistribution mechanism and the state guarantee. The frequent amendments of the Act on Health Insurance dealt mainly with the redistribution mechanism and contributions. The Act on the Treatment Code was amended several times particularly due to categorization of drugs.
- Act No. 416/2001 on Transfer of Some Competences from the State Administration Authorities to Municipalities and Higher Territorial Units (also called the Act on Competences, see *Planning, regulation and management*).
- Act No. 13/2002 on the Conditions of Transformation of Some Budgetary Organizations and Contributory Organizations into Non-Profit Organizations Providing Public-Benefit Services (the Act on Transformation).
- Act No. 216/2002 amended the Act on the Occupation of Pharmacist.
- Act No. 219/2002 amended the Act on the Occupations of Physician and Dentist.
- Act No. 311/2002 amended the Act on the Occupations of Nurse and Midwife.
- Act No. 596/2002 on the Health Protection of People related especially to environmental hazards e.g. radioactivity adjusted national law further to EU requirements.

The 2002–2004 reforms

The new government that emerged from the 2002 parliamentary elections developed a radical reform strategy *Health care reform: real reform for citizens (19)*, led by a medical manager (Rudolf Zajac) as Minister of Health. The encompassing reform agenda seeks to change the basic paradigms of the Slovak health care system and to reorganize fundamentally the structure and rules guiding the relationship of those in the health arena.

The overall goal of the new reform strategy is to create stable conditions for the operation of the health care sector, stop the rising debt and ensure a balance between revenues and expenditure in the health care sector as a whole. The strategy recognises the Ministry of Health's responsibility to provide conditions suitable for the best possible health of the population and undertakes to act in the interest of improving this. However, it also intends to create conditions that increase individuals' responsibility for their own health. The key objective of the current reform is to increase the health care system's responsiveness to population needs having regard for the financial resources available. It intends to increase the efficiency of the use of finance determined for the provision of health care, mainly in mandatory health insurance and, as a matter of priority, ensure the protection of individuals with particular regard to the provision of expensive health care services that realistically cannot be covered by an individual.

According to the reform strategy, health care provision should be based on a contractual structure between health care establishments and health insurance companies, equal opportunities and competition between health care facilities, and an elastic network of providers whose minimum scope will be defined by the state. Reducing the pressure on the network of providers and shifting the focus from inpatient to outpatient care, home care and one-day treatments will ensure greater patient satisfaction and economic efficiency of treatment. Reforms in health care are directed at more effective use of resources. Furthermore, there will be increased emphasis on prevention within the health care system, in particular, preventive programmes for the early detection of cardiovascular diseases and cancer.

At the same time the current reform strategy recognizes the high degree of corruption that is one of the reasons for the population's dissatisfaction. The Ministry of Health is focusing increased attention on measures to reduce the degree of corruption in health service provision. One such measure has been implemented for patients' direct payments for health care. The co-payments introduced in June 2003 should help to increase financial resources, decrease

unnecessary utilization and prevent corruption (see *Out-of-pocket payments*). The health care reform fits into the present government's broader overall reform context that concentrates on the reform of public finances to ensure continuous economic growth and compliance with EU requirements.

Since October 2002, several reforms of the previous government have been continued or developed further.

- The process of decentralization has continued and legislative obstacles removed to ensure that higher territorial units and municipalities have more flexible participation in the ownership of health care establishments regardless of their category or type. These owners are now allowed to rent their health care facilities to private organizations. Since January 2004 employers have had greater flexibility in aligning the motivation component of their employees' salaries.
- In hospital care, a disease-related group payment system was implemented in 2002 to enhance technical efficiency and the transparency of costs and services. The new case-based payment system is classified by type of provider and specialty.
- In addition several short-term measures, so-called stabilization measures, were introduced to contain costs and stop the growth of debts.
- In consideration of the very high share of expenditures that is spent on pharmaceuticals, the Ministry of Health supports the implementation of a more open and economically realistic drug policy at various intervention levels.
- In June 2003 the process of drug categorization was changed, fixed patient drug co-payments were introduced and spending caps for drugs and medical devices were established at the level of individual providers in outpatient care. Health insurance companies have negotiated strict monthly or quarterly prescription limits as part of their (selective) contracts with providers. The authority to approve maximum prices of drugs and medical devices was transferred from the Ministry of Finance to the Ministry of Health in January 2004.
- Since June 2003 co-payments have been extended to health care services such as hotel services, non-emergency transport etc. Persons in material need, children under 6, blood donors, patients with mental illness and long-term ill patients are exempt from co-payments.
- At the same time, health insurance companies became obliged to negotiate structured contracts with both outpatient and inpatient providers and to monitor their performance.

- In public health, the reform strategy led to State Health Institutes being transformed into Offices of Public Health. Great emphasis is placed on the development of complex measures focused on the fight against non-communicable diseases, including reduction or elimination of the risks to health. In this context, the Act on the Protection of Non-Smokers was adopted in the parliament in early 2004.
- Finally, a legislative framework for institutional training of health care professionals was adopted. This provides all universities with an opportunity to deliver postgraduate training for health care professionals at schools and institutions accredited for the relevant type of training.

The Ministry of Health prepared the major part of the government's health care reform strategy: reform of all major health care laws *(14)* (see *Planning, regulation and management*). The reform package of six acts was submitted to the National Assembly in April 2004 and enacted – with several amendments – in October 2004. The comprehensive reform will reorganize fundamentally the delivery and financing of health care. The six acts redefine virtually all the competences of health care actors and their interrelations in order to clarify responsibilities. The reforms are expected to increase the transparency of financial flows in the health sector and to contribute to improved efficiency in the use of available resources and higher quality of health care provision. Strict budgetary restrictions shall be enforced to ensure that no new arrears accrue.

- The Act on Health Insurance Companies and Health Care Supervision specifies the competences and obligations of the health insurance companies, their legal status, organization and management. It provides that health insurance companies become for-profit joint-stock companies, and the act defines the process required to transform the status of the existing five health insurance companies accordingly. Also the act seeks to establish the independent Office for the Supervision of Health Care that shall supervise these for-profit health insurance companies according to health care specific rules. The law defines its status, competences, organization and financing through health insurance companies. This office shall strengthen the institutional control of health insurance companies, with an emphasis on controlling the content and scope of health care services purchased within the framework of the "solidarity package". Furthermore, it shall focus on the control of health care providers to ensure the provision of state of the art health care. Also the solvency of health insurance companies shall be monitored tightly, including the obligation to pass independent financial audits. While the health insurance companies have been given higher competences, their responsibilities for ensuring access to health care for all

their enrolees have been increased. Rules are also set for the supervision and accreditation of health care provision.

- The Act on Health Insurance, together with the act described above, replaces the former Act on Health Insurance. Two types of health insurance will be introduced. Mandatory public health insurance will be founded on the principles of solidarity and equity and provided by health insurance companies on the basis of a permit issued by the Office for the Supervision of Health Care. There will be no limits on the number of policyholders but prudent control of solvency will be introduced. This type of health insurance will be used to finance the basic benefit package (solidarity package) as well as emergency care. There will be an alternative to direct payments for the cost of health care delivered and health-related services that will be provided by insurance companies on the basis of permits granted by the Financial Market Authority. These permits shall allow either the institutions providing mandatory health insurance or other institutions such as commercial insurance houses to offer independent voluntary individual health insurance. Health care and health-related services outside the framework of the solidarity package will be financed on this basis. The act also quantifies the future state contributions to health insurance, these will be linked to average income to ensure their proportional growth.
- The Act on Health Care and Services Related to Health Care will replace the current Act on Health Care. The new act redefines health care and health care provision-related services, the competences and obligations linked to health care delivery and redefines health-related documentation, informed consent, patient rights and obligations.
- The Act on the Scope of Health Care Reimbursed from Public Health Insurance that will replace the current Act on the Treatment Code redefines the scope and content of health care services, provision-related services, drugs and medical devices, as well as dietary supplements that will be provided on the basis of mandatory public health insurance (the solidarity package). Also it defines the processes for specifying the amounts for health care and related services that will not be reimbursed fully from public health insurance. The act is based on the International Classification of Diseases and splits all classified diagnostic entities into two groups: a list of priority diseases to be adopted by the parliament as an amendment to the law, in the framework of which all health care services, including e. g. drug treatment, shall be fully reimbursed from the mandatory public health insurance and a list of diagnoses to be reimbursed from public health insurance that contains

diagnostic entities where the amount and scope of reimbursement of the delivered health care services and products shall be set by a Ministry of Health categorization committee. This will comprise representatives of the Ministry of Health, health insurance companies and health professionals, and will categorize diseases and specify patient co-payments. The act places great emphasis on prevention and contains an amendment that provides a list of preventive health services that will be reimbursed fully by the mandatory public health insurance scheme. Other amendments to the law are the list of ATC drug groups in which at least one drug must be fully reimbursed from the public health insurance (the list contains 115 ATC groups) and a list of groups of medical devices. Another amendment contains the specification for the reimbursement of spa treatment.

- The Act on Health Care Providers, Health Care Workers, Professional Chambers in Health Care sets the conditions for health care delivery, conditions for performance of a health care profession and redefines the roles of professional organizations in health care. Also it sets the rules for transforming the state-owned health care providers into for-profit joint-stock companies, expected to take place in 2005. The act redefines the legal status of health professionals, allowing nurses and midwives to become independent providers of health care services.
- The Act on Emergency Health Services redefines the status, organization, management and financing of health emergency services and their integration with other types of rescue services.

Many clauses of the bills have received a broad consensus, e.g. state contributions based on average salary; the establishment of a voluntary complementary "individual" health insurance; clear priority setting; opportunities for the private sector to be more involved in health care delivery. Others, such as the redefinition of the basic benefit package or health insurance companies' transformation into for-profit joint-stock companies, have raised substantial controversies within parliament, amongst the public and in the health care arena. Following the second reading in May 2004, the summer was spent on amendments and compromises over the final shape of this fundamental reform project. The main elements were maintained when the draft reform package passed through parliament in September 2004 with the vote of the governing minority coalition and representatives of independent or opposition groups. The President vetoed this decision but the parliamentary majority proved firm, the National Assembly overturned this veto and finally enacted the reform package on 21 October 2004.

Implementation of reforms

The government has been the main driving force behind the implementation of health care reforms in Slovakia. Changes were recommended following consultation with expert groups comprising representatives of health professionals (the Slovak Medical Chamber, Slovak Pharmaceutical Chamber, Slovak Chamber of Dentists, Slovak Chamber of Nurses), other health workers, the health insurance companies (through their association) and the Hospital Association. Until 2002 the main direction of health service reform had changed little despite several changes of government, since the political parties agreed on most health care issues. 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 reform goals were implemented this way. The structure and organization of financing and providing health care subsequently have undergone substantial change in the last 15 years. The primary health care providers, pharmacists and almost all spa facilities have been privatized. Many specialists working in outpatient care have moved into private practice. By January 2003, all formerly state-owned type I hospitals were municipality-owned and all type II hospitals became region-owned. Several hospitals changed their status to not-for-profit organizations. Only the largest type III, university and specialized hospitals remained under state ownership, considerably reducing the state monopoly on health care provision.

However, many legal reforms have not materialized in the way the population or policy-makers had expected. Most notably the increase of financial resources, accountability and quality of care provision has not been realized and the current health care system is experiencing a severe financial crisis. The main reason seems to be that the available public resources still do not correspond with the amount and scope of services guaranteed by legislation. Other reasons include not only the rising cost of drugs and inefficient use of resources, mainly by the state-owned providers, but also insufficient contributions allocated to the health insurance system. In 1993 state contributions were reduced to just 10% of the sum indicated in the Act on Health Insurance thereby causing the first financial crisis in the system. This was adjusted by state subsidies. By the end of 1998 an overall economic downturn in the economy meant that employers' payments to the health insurance system were insufficient. This was worsened by the fact that many private companies closed without paying their debts.

The introduction of plurality of health insurers very early in the evolution of the current health insurance system resulted in a rapid increase in the number of health insurance companies, followed by mergers and closures. This led to

unnecessarily high transaction costs. A lack of appropriate control and regulatory mechanisms led to a rapid increase in the cost of drugs, substantial purchases of equipment by hospitals and a shift of services to more expensive and more specialized points of care.

After the devolution of polyclinics and secondary hospitals in 2001 and 2002, municipalities and higher territorial units inherited most of their arrears as the national government did not keep to the plan to clear their liabilities. The Ministry of Health established a state incorporated company called "Creditor" that achieved a short-tem partial reduction of their debts and tackled the debts of the health insurance funds by using gains from privatization.

During the reforms the methods of provider reimbursement were changed repeatedly. Despite achieving some improvements, none of the payment method reforms has been able comprehensively to motivate health professionals to provide better quality and more efficient and cost-effective services. The level of payment is still considered low in comparison with other professionals, especially for salaried employees.

The goal to strengthen primary care has not been achieved fully. Most notably cooperation between the primary care and other providers has not been optimized, even though the agencies for nursing home care were recognized recently as a cost-effective substitution for hospital care and their number has increased rapidly. Although gatekeeping has been introduced, patients often bypass their primary health care doctors.

The shift from inpatient to outpatient care has been partially accomplished. The decrees supporting one-day treatment have led to the establishment of several providers that focus on this type of care. However, these services are only in the starting phase and more complex evaluation will be possible only after a longer period.

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 initially encouraged primary health care doctors to prescribe more and newer, therefore more expensive, drugs. When capitation was chosen as the mechanism for reimbursing gynaecologists and primary care doctors for adults and children, it reduced the incentive to see patients.

The downsizing measures of recent years have targeted especially excessive inpatient capacity and hospitals with low occupancy rates, mainly in the capital and the major cities. Several provider units in the major hospitals were closed and surplus premises sold. Managers of the state-owned hospitals have greater responsibility and accountability for the quality of care provided and the effective use of resources. Several hospital managers have been dismissed.

Since October 2002 the health system reforms of the current government have been revolutionary rather than evolutionary, in contrast to previous reforms. Although it may be too early to make a comprehensive evaluation, already it is clear that most areas have achieved initial improvements. The adopted legislation brought increased patient involvement in the coverage of health care costs via the out-of-pocket co-payments introduced in June 2003. In May 2004 the Constitutional Court ruled that these co-payments did not restrict people's access to care, since fees were rather low and appropriate exemptions were provided.

Initial data about the impact of the reforms show that the numbers of outpatient visits per inhabitant, which were disproportionately high in comparison with EU countries, are decreasing slightly as are the numbers of inpatient stays per inhabitant. The number of prescriptions has decreased and drug expenditures slowed. Nevertheless, more time is needed before the effects of the financial limits introduced for prescribing physicians require can be evaluated. The reform package passed in October 2004 is due to be enforced stepwise from November 2005.

Conclusions

Slovakia largely has managed to transform its health care sector from an integrated tax-based system with a state monopoly in providing care into a pluralistic and decentralized social health insurance system with a mix of private and public providers. The reforms appear to have been implemented without significant adverse effects on the population's health. However, the introduction of a pluralist health insurance market has not fulfilled the hopes of increasing funding and the accountable provision of health care, and has resulted in many problems. Growing internal and external debts have raised fears about the future sustainability of the financial basis and the public-private mix of financing health care benefits. Trust in the governance of the current system has been eroded by a lack of appropriate regulatory and control mechanisms and inadequate systems for information, monitoring and feedback.

Various measures to contain costs and increase technical efficiency have succeeded in keeping overall and public health expenditures at a low level, by international comparison. Payment methods which encourage appropriate behaviour in health care providers and patients were introduced recently. However, their combination (e.g. capitation in primary care, fee-for-service for specialists) has proved to be financially unsustainable since it does not encourage the delivery of care at the most appropriate and cost-effective level. The recognition and quality of primary care delivery and the social status of primary care physicians have not improved because of the many restrictions on the volume and range of primary health care services. The way in which the 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 within a very short time. Bed capacities have been reduced but they remain comparably high, while community-based services and day-treatment are regarded as underdeveloped. Currently, there seem to be

increasing incentives to encourage efficiency in hospital managers, increased support for day treatment and shifting from inpatient to outpatient care.

Despite profound socioeconomic transformation and resource limitations, equity of provision of health care largely has been maintained under the new system. The density of providers is comparably high and so access remains very good overall, although there is a lower density of providers and longer distances in rural areas, which affect particularly Roma living in settlements in remote areas *(38,39)*.

Equity in financing health care may have been reduced to some extent as insurance contributions from employees and employers are proportionate instead of progressive. The ceiling on contributions produces a certain regressive component in the contribution system. In addition, private out-of-pocket payments have increased although, until recently, Slovakia relied on a relatively small share of private expenditures. Also the state contribution on behalf of the economically inactive represents a significant progressive component.

The consumer choice guaranteed in the legislation has not produced the expected outcomes. Although patients can choose their primary care physician, specialist and hospital, the relationship between health care providers and patients 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. pressing doctors to prescribe the newest, often most expensive, drug). These factors contributed to produce unsustainable health care bills that were countered by imposing limitations on the volume of services and financial limitations on the prescription of drugs and medical devices.

Quality of care is critically dependent on the morale of health care professionals. This has not improved as the right incentives have not been implemented yet and the envisaged goals of better income and higher social status have not been accomplished by the health reforms. Many health professionals remain disillusioned, fifteen years after the velvet revolution. Particularly, there are no incentives sufficient to improve the quality of care at primary care level. The introduction of fee-for-service payments for preventive care at primary care level in June 2003 represents a new incentive that should enforce prevention; however the results must be evaluated after a longer period.

In summary, the transformation process in Slovakia is not yet complete. Although the major reforms envisaged in the early 1990s were implemented, many crucial problems remain unsolved. In 1996 the first Health Care in Transition Profile on Slovakia *(40)* concluded that the country had achieved a relatively painless transition from socialist central planning to a pluralistic, health insurance based health system. The 2000 HiT *(1)* noted that the health

sector was in severe financial and organizational difficulties and that health care reform had not resulted in improved cost-containment and cost-effectiveness.

Between 1998 and 2002, a new set of comprehensive health care reforms was prepared and implemented. This addressed issues such as defining the appropriate relationship between the Ministry of Health and the health insurance companies and health care providers; finding better ways to balance positive and negative incentives in financing, resource allocation and provider reimbursement; and redefining health technology assessment for both pharmaceuticals and health services. Several important steps were implemented such as reducing excess inpatient bed capacity; enabling the rise of a not-for-profit hospital sector; establishing municipal and regional hospitals; and creating a reimbursement system based on individual cases (broad band DRG), including incentives for day treatment.

However, the reforms of 1998–2002 failed to solve the basic discrepancy between the available public funds and the guaranteed scope of services that must be financed from them. The current comprehensive reform agenda addresses this balance primarily, using it as a basis for further delivery-side reforms that should lead to effective (not only declared) access, better quality of provided care and improvement in health professionals' morale. The reduced range of entitlements provided as part of the basic benefit package is considered to be an incentive for citizens to be more involved in the care of their own health and should function as a disincentive for informal payments.

Fundamental health care reform became a political priority of the present government in 2002. Throughout the public reform debates there has been increasing awareness of the need for comprehensive reforms to tackle the main challenges of the health care system: financial sustainability in the face of growing debts; improved accountability; and the shaping of appropriate and efficient health care provision that is responsive to the changing needs of the inhabitants. The reform agenda's first stabilization measures in June 2003 appear to have reduced the number of prescriptions and physician visits without restricting socially disadvantaged persons' access to necessary care but their impact cannot be evaluated fully at this early stage.

The package of reform bills raised considerable controversies, inside and outside the parliament, about balancing equity and efficiency, market orientation and state involvement. Although amended during the legislative process the major elements were maintained when the National Assembly approved all six bills in October 2004. The acts shall be enforced starting in November 2004 and implemented in several steps. Although painful, successful implementation of the reform initiative could represent a significant step forward in the history of the new Slovak health care system.

References

1. Hlavačka S, Skačková, D. *Health care systems in transition: Slovakia.* Copenhagen, European Observatory on Health Care Systems, 2000.
2. Statistical Office of the Slovak Republic. *Basic data. Population and housing census*, *26 May 2001*. Bratislava, 2001.
3. The World Bank. *Slovak development policy review.* Washington, 2002 (Report No. 25211–SK).
4. Organisation for Economic Co-Operation and Development (OECD). *Health data*. Paris, OECD, May 2004.
5. *Health for all database*. Copenhagen, WHO Regional Office for Europe, June 2004.
6. Statistical Office of the Slovak Republic. *Health statistics yearbook of the Slovak Republic*. Bratislava, 2002.
7. The World Bank. *Social Sector Policy Review: The Health Sector*. Washington, 2001.
8. Durian J, Krizan P. Vychodiska a ciele zdravotnickej reformy I. [Determinants and goals of health care reform I] *Zdravotnicke aktuality*, 1: 3–5.
9. Makovicky et al. *Organisation of Health Care*. Osveta, Martin, 1974.
10. Government of the Slovak Republic. *The Policy Statement. As approved by the National Council of the Slovak Republic*. Bratislava, November 2002.
11. Zajac R, Pažitný P. Health Care. In: Kollar M, Meseznikov G. eds. *Slovakia 2002. A global report on the state of society.* Bratislava, Institute for Public Affairs, December 2002.

12. Ministry of Health of the Slovak Republic. *Transformation steps in the health sector for 1999–2002. Submitted to the Government of the Slovak Republic*, Bratislava, 1999.

13. Statistical Office of the Slovak Republic. *Selected indicators on health insurance companies, the Social Insurance Agency and the National Labour Office*. Bratislava, 2003.

14. Colombo F, Tapay N. *The Slovak health insurance system and the potential role for private health insurance: policy challenges.* Paris, Organisation for Economic Co-operation and Development, 2004 (OECD health working papers, vol. 11).

15. Demes E et al. Health Care. In: Butora M, Skladony TW, eds. *Slovakia 1996–1997. A summary report on the state of society*. Bratislava, Institute for Public Affairs, 1998.

16. Vagac L, Haulikova L. Slovak Republic. In: *Gesellschaft für Versicherun gswissenschaft und -gestaltung e.* V. (ed.). *Study on the social protection systems in the 13 applicant countries]*. Brussels, European Commission Employment and Social Affairs DG, January 2003.

17. Kovac E. *Zdravotne poistenie – zdravotnopoliticke a ekonomicke suvislosti. [Health insurance – health policy and economy contexts*], Bratislava, 2003.

18. Borik M, Zajac R, Pažitný P. *Deformations of the present system and the determination of operation criteria for insurance companies*. Presentation at the Health Reform Seminar in Bratislava, February 2001 supported by the World Bank.

19. Zajac R, Pažitný P. *Strategia reformy zdravotnictva – realnej reformy preobcana. [Health care reform strategy – the real reform for citizens*]. Bratislava, M.E.S.A. 10, 2001.

20. Ministry of Health of the Slovak Republic. *Health reform strategy. Debt reduction strategy.* Presentation at the World Bank workshop in Warsaw, May 2003.

21. Anderson J. *Corruption in Slovakia: results of diagnostic surveys*. Prepared at the request of the Government of the Slovak Republic by the World Bank and the United States Agency for International Development, 2000.

22. Ministry of Health of the Slovak Republic. *Report on the actual situation in health care provision.* Submitted to the National Council of the Slovak Republic, Bratislava, 1999.

23. Ministry of Health, Health Statistics Yearbook, Bratislava, 1991–1996.
24. Statistical Office of the Slovak Republic and Ministry of Finance, Statistical Yearbook, Bratislava, 1997–1999.
25. Statistical Office of the Slovak Republic and Institute of Health Information and Statistics, National Health Account, 2000–2002.
26. Institute for Health Information and Statistics. *Health statistics yearbooks 2000-2002.* Bratislava, 2001-2003.
27. Ministry of Health of the Slovak Republic. *Optimum network of health care facilities in the Slovak Republic*. Bratislava, 2001.
28. Institute for Health Information and Statistics. *Health Statistics Yearbook 1998*. Bratislava, 1999.
29. Institute for Health Information and Statistics. Unpublished data, Bratislava, 2004.
30. Ministry of Health of the Slovak Republic, Unpublished data, Bratislava, 2004.
31. Ministry of Health of the Slovak Republic. *The reform of structure, management and financing of the health sector of the Slovak Republic*. Bratislava, Vestnik MZ SR, 1990.
32. Ministry of Health of the Slovak Republic. *Updated national health promotion programme*. Bratislava, 1995.
33. Ministry of Health of the Slovak Republic. *Continuing transformation of the health sector and principles of public health policy.* Submitted to the Government of the Slovak Republic, Bratislava, 1995.
34. Ministry of Health of the Slovak Republic. *National action programme on environment and health.* Bratislava, 1997.
35. Ministry of Health of the Slovak Republic. *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, inter-connection between health insurance and network of health care facilities.* Submitted to the National Council of the Slovak Republic, Bratislava, 1996.
36. Ministry of Health of the Slovak Republic. *Concept of drug policy.* Approved by the Government of the Slovak Republic, Bratislava, 1996.
37. Ministry of Health of the Slovak Republic. *Report on the analysis of economic development in health insurance companies, health care facilities, reasons for unfavourable development in the health sector*

and definition of problems of financing health care with proposal of measures for their improvement. Approved by the Government of the Slovak Republic, Bratislava, March 1998.

38. Ecohost/ Masaryk University. *Health needs of the Roma population in the Czech and Slovak Republics*. London, London School of Hygiene & Tropical Medicine, 2000.
39. The World Bank, Foundation S.P.A.C.E., INEKO. *Poverty and welfare of Roma in the Slovak Republic*, Bratislava, 2002.
40. Skačková D. Health care systems in transition: Slovakia [in italics]. Edited by Marshall T, Copenhagen, World Health Organization Regional Office for Europe, 1996.

Bibliography

Busse R. Slovakia: progress and problems after seven years of mandatory health insurance. *EuroObserver*, 2001, 3(1):5–6.

Commission of the European Communities. *Regular report on Slovakia's progress towards accession.* Brussels, 2002.

Commission of the European Communities. *Monitoring report on the Slovak Republic's progress in its preparation for the EU membership. September 2002–May 2003*. Brussels, June 2003.

Hlavačka S, Bacharova L, Rusnakova V, Wágner R. Performance implications of Porter's generic strategies in Slovak hospitals. *Journal of Management in Medicine*, 2001, Vol. 15, 1:44–66.

Ministry of Labour, Social Affairs and Family. *Reform of the pensions system in the Slovak Republic.* Bratislava, 2003.

Organisation for Economic Co-Operation and Development (OECD). *OECD economic surveys: Slovak Republic*. Paris, OECD, 2002.

Pažitný P, Zajac R. Zdravotna politika, Kapitola 8. In: Marcincin A, ed. *Hospodarska politika na Slovensku* 2000–2001. [Chapter 8: Health policy. In: *Economic policy in Slovakia 2000–2001*], Bratislava, 2002.

Sedláková D, Hlavačka S, Riesberg A. Fundamental reforms planned in Slovakia, *EuroObserver*, 2004, 6(3): 7–8.

Sicakova E. *Faces of corruption in Slovakia (I)*. Slovak Republic, Center for Economic Development, Transparency International, 1999.

The World Health Organization. *World Health Report 2002*. Geneva, WHO, 2002.

United Nations Development Programme. *Human development report 2003*. New York, UNDP, 2003.

United Nations Development Programme. *Human development report 2004: cultural liberty in today's diverse world.* New York, UNDP, 2004.

Vice-Prime Minister for Economy of the Slovak Republic. *Development of the Slovak economy under the government of Mikulas Dzurinda.* Bratislava, 2002.

Wágner R, Hlavačka S, Bacharova L. Hospital human resource planning in Slovakia. *Journal of Management in Medicine*, 2000, Vol. 14(5–6):383–405.

Zajac R, Pažitný P. *Deformations of the current system*. Situation in health care and proposed solutions, Slovak Economic Forum, Bratislava, October 2000.

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