European Observatory on Health Care Systems

Health Care Systems in Transition

Bulgaria



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

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

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

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

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

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

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

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

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

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

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

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

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

The research director for the Bulgaria HiT was Martin McKee.

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Introduction and historical background

Introductory overview

Bulgaria is located in south-eastern Europe bordered by Romania to the north, the Black Sea to the east, Turkey and Greece in the south, and the former Yugoslav Republic of Macedonia and also the Federal Republic of Yugoslavia to the west. The national capital is Sofia. The country covers 110 910 km^2 of mountainous terrain with lowlands in the north and southeast, and enjoys a mild continental climate. The location of Bulgaria between Europe and Asia has shaped its political and economic strategies.

Fig. 1. Map of Bulgaria[1]

Source: Central Intelligence Agency, The World Factbook, 1997.

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

The population numbered 8 283 200 in 1997, with 67.7% living in urban areas. The ethnic composition (a contested estimate) was 85.8% Bulgarian, 9.7% ethnic Turks, 3.4% Roma and 1.1% other groups. The religion of the majority, 85%, is Bulgarian Orthodox, while 13% are Muslim, and the rest are a mix of smaller sects. Bulgarian comes from the Slavic group of languages and is written in the Cyrillic alphabet.

The land of Bulgaria was conquered by the Romans in 46 BC. A Turkic group, the 'Proto-Bulgars', arrived in the mid-sixth century but were assimilated eventually by the more numerous Slavs. In 681, Khan Asparouk founded the first Bulgarian kingdom. Tsar Boris I adopted Orthodox Christianity and in 870 the Bulgarian Orthodox Church became independent with its own patriarch.

Bulgaria has had long periods as a vassal state to more powerful neighbours and was ruled by the Byzantine Empire in the eleventh century. Five centuries of Ottoman rule began from 1396. The Bulgarians remained largely self-governing agrarian communities and continued to practice Christianity. Turkish power waned in the eighteenth century and Bulgarian culture began to revive in the nineteenth century. A revolt against the Turks was brutally suppressed in 1876. Serbia then declared war on Turkey and was joined by Russia and Romania. Bulgaria was liberated by Russia, which forced Turkey to cede a large part of the Balkan Peninsula to Bulgaria in 1878 in the Treaty of Berlin, but the western powers later reversed most of these gains. The collision of geopolitical interests by Russia and western European nations led to their interest in 'the Eastern question'. 3 March 1878 is celebrated as Independence Day marking the beginning of the modern Bulgarian state, and 1908 marks its full independence from the Ottoman Empire.

The First Balkan War broke out in 1912, since the three Balkan states, Bulgaria, Serbia and Greece, all claimed Macedonia, which had remained part of the Ottoman Empire. Bulgaria was defeated in the Second Balkan War and Macedonia was divided between Serbia and Greece. Bulgaria sided with Germany in the First World War in an attempt to regain Macedonia, and again in the Second World War. An underground movement during the war opposed Tsar Boris III and his pro-German government. In August 1944, Bulgaria declared itself neutral in the face of the advancing Soviet Army, which entered Bulgaria in September 1944. The Bulgarian communists under Georgi Dimitrov overthrew the monarchy.

Bulgaria was declared a republic. In the elections of October 1946, Georgi Dimitrov was elected as the Communist Prime Minister. Soviet troops left the country and disputes were settled with Greece. In 1955, Bulgaria was admitted to the United Nations but remained isolated from the rest of the world under the sphere of influence of the USSR.

Todor Zhivkov was Bulgaria's leader from 1956 to 1989. Beginning in the 1940s, agriculture was collectivised and the country embarked upon major industrialization. Bulgaria became one of the most prosperous countries in Eastern Europe. This prosperity had faltered by the end of the 1980s, being supported by massive foreign loans.

With the advent of *perestroika*, the fall of the Berlin Wall and public disquiet about the political and economic policies of the country, Bulgarians staged widespread public demonstrations. Zhivkov was deposed in November 1989 by an internal coup within the Communist Party in Bulgaria. He was the first of the deposed Communist leaders to be put on trial for corruption in 1991.

The Communist Party relinquished its monopoly, changed its name to the Bulgarian Socialist Party and won the free elections in June 1990. A new Constitution was adopted in July 1991. Mass strikes in response to price rises and unemployment resulted in the resignation of the socialist government. The Union of Democratic Forces (UDF), a coalition group, won the elections in October 1991 as the first non-communist government. In October 1992, the Union of Democratic Forces government was defeated in Parliament and a new coalition installed. The Bulgarian Socialist Party won the elections in late 1994. Following anti-government protests, an early election was held in April 1997 and won by the Union of Democratic Forces with an absolute majority. The policy priority of the new government has been to stabilize the economy and to pass important legislation based on principles of privatization, decentralization and social protection of the poorest, with the support of large International Monetary Fund (IMF) loans.

Bulgaria is now a multi-party democracy, governed by a single chamber with 240 directly elected parliamentarians and a directly elected president. Parliament is elected for a term of four years and the president for five years. The state is divided into twenty-eight regions (oblasts), with centrally appointed administrative personnel (replacing the nine oblasts of communist times). A number of ministries, including the Ministry of Internal Affairs, the Ministry of Finance and the Ministry of Health, have deconcentrated administrative responsibilities to 28 regional offices, but power remains highly centralized.

There are 262 municipalities, each of which elects a municipal council and a mayor. Since 1991, these have been delegated substantial responsibilities for health care, local services, education and social affairs. Municipalities are responsible for collecting local taxes, which they retain for their local budgets, and republican taxes, some of which are retained and the rest of which pass to the Ministry of Finance. Central government also distributes revenue to the municipalities. Although there are some guidelines from central government, municipalities have considerable discretion about how they allocate their local resources.

Bulgaria applied for membership of the European Union in December 1995 but is not among the first wave of central and eastern European countries with whom the European Union has opened negotiations (*7*).

Social and economic indicators

The population of Bulgaria has been declining throughout the 1990s as the population ages in common with many European countries. Nearly 16% of the population are aged 65 years and over (Table 1), which is the same proportion as the European Union average. The birth rate has been dropping steadily from the beginning of the century (*9*). Deaths now outnumber births and the population ageing process will continue.

Population loss is also due to migration. The National Statistical Institute estimates up to 600 000 people emigrated between 1989 and 1995. This included members of the ethnic Turk community in the wake of attempts at forcible assimilation by the previous regime. Since 1995, the average annual rate of migration is estimated at 30 000 persons.

Table 1. Demographic indicators

Indicators	1989	1990	1991	1992	1993	1994	1995	1996	1997[c]
Population (millions)[b]	8 987	8 767	8 669	8 595	8 485	8 460	8 427	8 385	8 283
% population under 18 years[b]	25.1	24.8	24.5	23.9	23.3	22.8	22.3	21.7	22.5
% population aged 65+ years[a]	12.6	12.9	13.4	14.0	14.4	14.7	–	15.3[c]	15.6[c]
Crude birth rate per 1000 population[b]	12.7	12.1	11.2	10.5	10.0	9.5	8.6	8.7	7.7
Crude death rate per 1000 population[b]	12.0	12.5	12.8	12.7	12.9	13.2	13.6	14.0	14.7

Source: [a]WHO Regional Office for Europe health for all database; [b]UNICEF TransMONEE database 3.0; [c]National Statistical Institute, Annual Statistics 1998, Sofia.

Prior to the communist era, Bulgaria was a largely agricultural country of small rural landholders. Bulgaria nationalized its agriculture and industry to a greater extent than the central European countries such as Poland, and by the 1970s, Bulgaria was a leading producer of engineering products. Living standards did not rise as quickly as expected, however, and the economy was in decline by the late 1980s.

Now one of the poorest countries in central Europe, Bulgaria has moved slowly from a command to a market-oriented economy. The hopes of the population for a better life have not been met. After the near collapse of the

economy in the early 1990s, there were signs of recovery but this was not sustained, with a sharp fall in 1996 (Table 2). Bulgaria lacked an infrastructure for sustained growth; its trade ties were with the former Soviet Union; it depended on imports of energy; and it continued to accumulate substantial foreign debts. The economy has been in crisis since 1996 with negative GDP growth (–6.9% in 1997) and triple digit inflation (Table 2). Lagging progress on structural reforms, including the failure to privatize state assets, led the International Monetary Fund to cancel loans. Confidence in the currency collapsed and negative growth continued in 1997. There is also a sizeable informal economy based on a barter economy, which some sources estimate to be around 18–30% of GDP. Bulgaria restructured its foreign debts in 1997. The International Monetary Fund required Bulgaria to cut government expenditure, restructure the Soviet-style economy and set up a currency board (*6*). A key part of the structural reform programme in 1998, therefore, has been the privatization of state enterprises.

GDP per capita in 1997 was US $1227 compared to the central and eastern European average of US $2967. Even when adjusted for purchasing power parity, Bulgaria was only PPP US $4480 compared to the central and eastern European average of PPP US $6923 (*19*). Real wages have fallen to below half their 1989 level (Table 2).

Table 2. Macroeconomic indicators

Indicators	1990	1991	1992	1993	1994	1995	1996	1997[c]
GDP growth rate in constant prices (% change)[b]	-9.1	-11.7	-7.3	-2.4	1.8	2.1	-10.9	-6.9
Annual inflation rate[c]	23.9	438.5	79.5	63.9	121.9	32.9	310.8	578.6
GDP $ per capita[c]	2 180	943	1 508	1 276	1 147	1 559	1 189	1 227
Government expenditure % GDP[b]	65.9	45.6	45.4	48.1	45.7	43.0	47.6	34.9
Real average wage index (1989=100)[b]	111.5	68.0	76.7	77.6	63.7	60.2	49.6	–
Registered unemployment rate[c]	1.5	6.7	13.2	15.8	12.8	11.1	12.5	13.7

Source: [a]WHO Regional Office for Europe health for all database; [b]UNICEF TransMONEE database 3.0; [c]National Statistical Institute, Annual Statistics 1998, Sofia and Ministry of Finance figures.

Unemployment has grown with a 1997 registered rate at 13.7%. The International Labour Office (ILO) estimates the real rates as much higher, such as 21% in 1993. Surveys by the National Statistical Institute reported that only 52% of the labour force (people of working age) were employed in 1996 with high unemployment among young people and women. Poverty remains a serious

social problem so that despite fiscal constraints, the government raised the pension rate in April 1997 to the equivalent of US $30 per month.

The consequences of the economic crisis for government services are considerable. Government expenditure as a % of GDP has dropped from 65.9% in 1990 to 34.9% in 1997. Since the introduction of the currency board in July 1997 most key financial indicators have improved and macroeconomic stability has been achieved (*7*). GDP growth has improved and was estimated at 5% in 1998 (*16*).

Health indicators

Health indicators have generally worsened in Bulgaria as the economy deteriorated, with worse rates in rural than urban areas. Bulgaria is part of the growing east–west gap in mortality rates since the 1960s, especially among men in middle age, in common with other central and eastern European countries. This trend continued in the transition years of the 1990s, as shown by life expectancy, which dropped from 75.1 years for women in 1989 to 74.4 in 1997, and for men from 68.6 years in 1989 to 67.2 in 1997 (Table 3). Life expectancy in Bulgaria throughout the 1990s was similar to central European countries but better than the countries of the former USSR. Mortality rates from chronic conditions such as ischaemic and cerebrovascular diseases have increased (with strokes being six times the EU average) as have deaths from traumas. This pattern is associated with unhealthy lifestyles, unbalanced nutritional patterns, a worsening environment and increasing poverty. Rates of tobacco use have risen rapidly in recent decades with the proportion of smokers in the male population among the highest in Europe (*13*). Consequently lung cancer rates are rising steeply among middle aged males. In addition, some communicable diseases that were previously controlled such as tuberculosis have begun to rise.

Mortality rates for infants and young children and maternal mortality rates have also worsened during the 1990s (Table 3). These rates are worse than the central European countries but better than the countries of the former USSR.

Abortions have exceeded the number of births since at least 1980 (*10*), and Bulgaria has one of the highest abortion rates in Europe (*19*).

Table 3. Population health indicators

Indicators	1989	1990	1991	1992	1993	1994	1995	1996	1997[c]
Female life expectancy at birth[b]	75.1	74.8	74.7	74.5	74.6	74.9	74.9	74.6	74.4
Male life expectancy at birth[b]	68.6	68.1	68.0	68.0	67.7	67.3	67.1	67.1	67.2
SDR ischaemic heart disease 0–64, per 100 000 males[a]	85.4	89.4	91.1	90.5	105.1	100.1	–	–	–
SDR cerebrovascular disease 0–64, per 100 000 males[a]	63.7	68.5	67.6	74.7	83.1	74.4	–	–	–
Infant mortality (per 1000 live births)[b]	14.4	14.8	16.9	15.9	15.5	16.3	14.8	15.6	17.5
Under 5 mortality rate per 1000 live births[b]	18.3	18.7	21.4	20.6	19.6	20.9	19.0	19.8	23.5
Maternal mortality (per 100 000 live births)[b]	18.7	20.9	10.4	21.3	14.2	12.6	19.5	19.4[c]	18.7
Abortions per 100 live births[a]	118	138	144	149	127	123	135	137	137

Source: [a]WHO Regional Office for Europe health for all database; [b]UNICEF TransMONEE database 3.0, [c]Ministry of Health health statistics.

Historical background

First half of the twentieth century

Collectively funded health care services began in Bulgaria at the end of the nineteenth century following independence from the Ottoman Empire. Between 1879 and 1903 health care laws were enacted and facilities were built. District and municipal physicians were appointed from among the local private physicians for all towns with a population of more than 4000 people. Doctors' assistants (feldshers) based in villages also worked partly on a private basis. Hygiene and sanitation improvements were made. State-funded free hospital care for the poor was established. Large state hospitals were built during the Russian–Turkish war, initially as military hospitals. The Bulgarian medical and dental associations were set up in 1901.

A law on public health care was passed in 1903. Some private health facilities were constructed early in the century including hospitals, sanatoria and polyclinics. A social and health insurance scheme was set up in 1923, which

integrated existing small funds. A law required all employees in government, public and private enterprises and on farms to have compulsory insurance against accidents and illness, and to insure for maternity care and retirement pensions. This single fund was similar to the Bismarckian insurance system. New hospitals and sanatoria were constructed across the country. The Bulgarian Red Cross also offered a range of health services. The medical university of Sofia was founded in 1918 and became a centre for medical research.

In 1929, a law was passed on the health of the nation. Responsibility for the maintenance of health facilities was passed from the state to the municipalities. Facilities for maternity care, and for preventive care such as immunizations, were developed along with school health care, health promotion and hygiene. A network of 'domestic doctors' practised family medicine. The rural community gradually got better access to health care. Health insurance cover was widened, so that by 1948 nearly 70% of the population was covered, including all state employees. A Ministry of Health was created in 1944 to manage and coordinate the entire health care system, which consisted of a well developed public sector and a smaller private sector.

From 1948 to 1990

In 1948, the communist administration began to replace the existing system with the Soviet 'Semashko' health care model. Private hospitals and pharmacies were nationalized and brought under central state control. The health insurance system was abolished. Central government became the sole funder and provider of health care services. The Bulgarian medical association was abolished and replaced with a single trade union to represent all health care workers. Training was increasingly centralized and postgraduate education taken over by the Ministry of Health. A network of health services was expanded, with health centres and maternity clinics built in the villages. The family doctor network was replaced by polyclinics, which were integrated with the hospitals. Primary health care was organized within a district (rayon) and patients were allocated to polyclinic doctors according to their address.

From the 1950s, sanitary–epidemic stations were set up across the country. These public health services aimed to eradicate communicable diseases such as tuberculosis, malaria, typhoid and parasitic diseases. Extensive immunization was carried out, dental services and a network of pharmacies were developed. Improved access to health services and reductions in communicable diseases reduced infant mortality and increased life expectancy. Research institutes and hospital clinics were established in the main branches of medicine.

The 1960s and 1970s were characterized by the construction of new hospitals throughout the country and more doctors were trained after the establishment of five new University Medical Schools. The 1973 People's Health Act set out the legal basis and the principles for the health care system.

The Bulgarian health system achieved much during the communist period including the guarantee of free and accessible health care. A network of health services was established across the country and many communicable diseases were largely controlled. The inflexible and centrally controlled health system, however, lacked the capacity to respond to worsening indicators for chronic diseases, and contained few incentives for the provision of good quality and efficient health care. As the economy declined, the funds needed to sustain the health care system were not available and demand exceeded the supply of services, although shortages were never officially acknowledged. With the change of government in 1989, many of the elements of this model of health care had become thoroughly discredited in Bulgaria (*3*).

Organizational structure and management

Organizational structure of the health care system

The Bulgarian health care system in the 1990s is still mainly based upon the Soviet Semashko model of public sector provision, tax-based financing, weighted towards hospital care, and with few incentives for providers to improve the effectiveness and efficiency of health care. Reforms in the early 1990s began by returning to some earlier traditions. First, laws were passed to allow private health services; second, medical associations were re-established; and third, responsibility for many health care services was devolved to the municipalities.

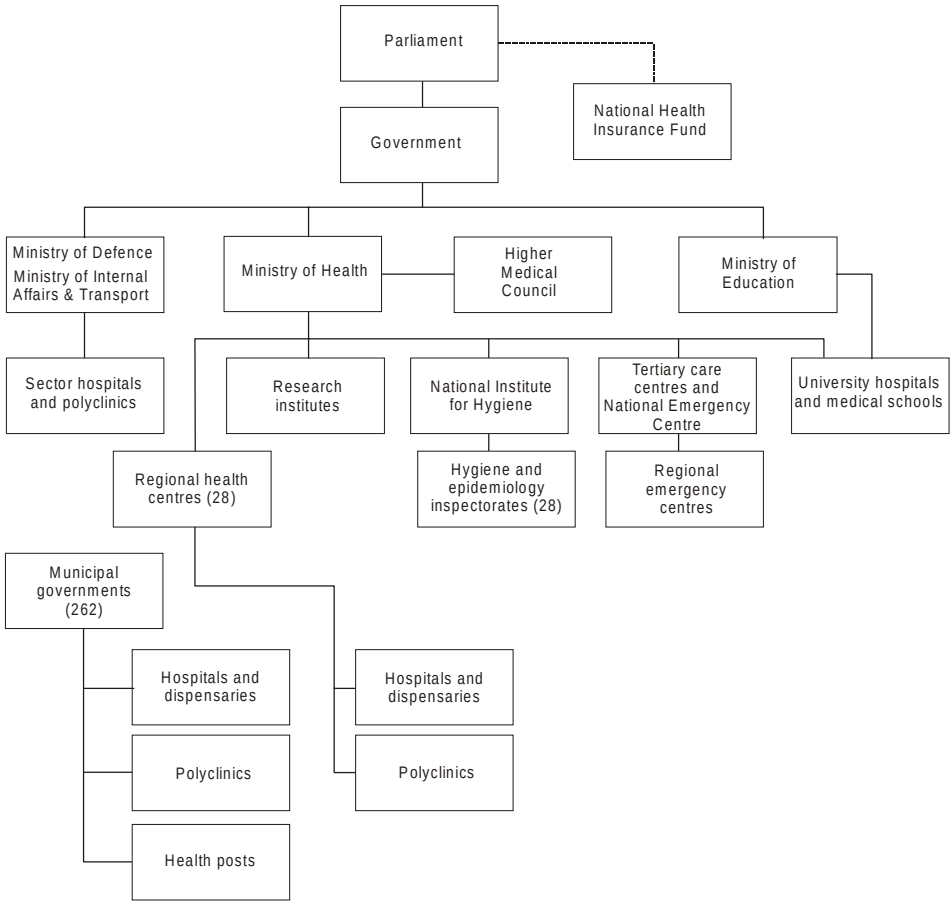
The Ministry of Health

The Ministry of Health retains responsibility for overall supervision of the health care system, administered since 1995 through the 28 Regional Health Centres. (Between 1987–1995 the Ministry of Health had administered health services through ten regions). The Regional Health Centres appoint the directors of municipal health facilities. The Ministry owns and administers a number of national research centres. These include the national centres for hygiene, medical ecology and nutrition, health information, pharmaceuticals institute, public health and health care financing. The national centres for tertiary care include oncology, cardiovascular diseases, radiobiology, rehabilitation neurology and immunology. Other specialist hospitals include 14 regional specialist psychiatric hospitals and ten hospitals for pulmonary diseases. The Ministry also administers the 28 regional centres for emergency care and 28 hygiene–epidemiological inspectorates.

Higher Medical Council

This consultative body, chaired by the Minister of Health, has 24 members. Eight are from the Ministry of Health and other ministries involved in health

Fig. 2. Organizational chart of the health care system



care; eight from the doctors' and dentists' associations; and eight from the medical universities. The council meets at least four times a year to advise on health policy, the hospital network and postgraduate medical training. This Council is also responsible for licensing private health care facilities.

Municipalities

Municipal Councils and mayors are elected under the 1991 Local Self-Government Act. The ownership of many health care facilities has now been transferred to municipalities. Partial responsibility for financing was transferred to the municipalities in 1991, and ownership of most facilities was devolved in

1992. Health care facilities were recognized as legally constituted entities under amendments to the Health Law in 1997. Municipalities now own polyclinics, small and medium-sized hospitals and hospitals providing secondary care for their populations. In addition, they are responsible for specialized paediatric and gynaecological hospitals and for specialized regional dispensaries (for pulmonary diseases, oncology, dermato-venereology, psychiatry and sports medicine). Municipalities must approve the directors who are appointed by the regional health offices of the Ministry of Health. These directors are therefore accountable both to municipal government and to central government.

Parallel health care services

A number of other ministries own, manage and finance their own health facilities. These are the Ministry of Defence (for the military and their families), the Ministry of Internal Affairs (for the police and their families) and the Ministry of Transport (for its employees and their families). Each of these has their own hospitals and polyclinics; for example the Ministry of Transport owns eight hospitals and the Ministry of Defence owns 14 hospitals. These parallel health care systems are also being reorganized. The Ministry of Health recently absorbed their parallel hygiene and epidemiology services. It is expected that the number of hospitals owned by the Ministry of Defence will be significantly reduced in the near future.

Health Insurance Fund

The Health Insurance Act passed in June 1998 set up a Bismarckian type of National Health Insurance Fund, with a single statutory insurer and compulsory contributions based on a payroll tax. A board answerable to Parliament will manage the fund and Parliament must approve the payroll contribution rate. The Fund will eventually become a major purchaser of health care services through contracts with providers. The new system is being phased in. Contributions will be collected from July 1999, funding of primary care and outpatient care will begin from January 2000 (under purchase/provider contracts), and hospital inpatient care will be phased in from January 2001.

Professional organizations

The Bulgarian Medical Association was re-established in 1990 as were professional associations of dentists and pharmacists. In 1998, a Law of Professional Organizations of Physicians and Dentists was adopted by the Parliament giving legal status to these two organizations. The professional organizations of

physicians and dentists defend the rights and professional interests of their members and represent them in negotiations with the Health Insurance Fund. Organizations have also formed to represent nurses, midwives and paramedical workers although these have yet to exert much influence.

Universities

The medical universities, including Sofia and Varna Medical Universities and the Medical Colleges in Plovdiv, Pleven and Stara Zagora, are largely autonomous with joint coordination by the Ministry of Health and the Ministry of Education. The Sofia Medical University previously administered the twelve university hospitals in Sofia. Since 1999 these hospitals are financed by the Ministry of Health. The rest of the Medical Schools administer their clinics from their allocated funding, but funds for curative care and teaching activities in universities hospitals and clinics will be separated.

The private sector

Private practice has expanded since it was legalized in 1991 (having been banned in 1972). The private sector mainly consists of pharmacies, dental clinics, laboratories and specialist care rather than first contact primary care. By the end of 1998, 155 private health establishments (including 16 hospitals, 87 private polyclinics and 16 laboratories) have been created. These facilities are licensed by the Higher Medical Council. There are regulations concerning the running of private medical and dentist practices and facilities. The services in the private sector are paid out-of-pocket by the patients.

The number of physicians registered as private practitioners rose from 4124 in 1992 to 9424 in 1994 and then fell to below 8000 in 1996 and 1997 (*12*). The number of private dentists has increased (2594 in 1992, 4556 in 1994 and 3684 in 1997). Other staff have less opportunity for private practice. Private doctors must register with municipalities but are employed in the public sector and maintain a private practice using government facilities.

Over one dozen private health insurance funds now exist in Bulgaria. Also, some form of supplementary insurance is envisaged under the planned compulsory insurance system.

The voluntary sector

There are a number of nongovernment organizations in the health sector. These include organizations that existed during communist times, such as those for

the blind, for the deaf and for the disabled. In addition, a number of newer organizations have developed, representing people with multiple sclerosis, diabetes and cancer.

Otherwise, no organized consumer groups as yet exist in Bulgaria. Dissatisfaction with health services may become a more important political issue. No systematic consumer surveys have been conducted, but a survey in the early 1990s reported that 64% of patients regarded primary and secondary health care services as 'bad' or 'very bad' (*10*).

Planning, regulation and management

The Ministry of Health formulates policy, drafts legislation and plans programmes. Its capacity for policy analysis has been supported with World Bank and PHARE projects in 1996–1998. Other organizations are consulted on health planning through the Higher Medical Council, or directly such as the medical universities and the national association of hospitals. The 28 regional health centres of the Ministry of Health also collect information for the National Health Informatics Centre. These regional health centres are supposed to implement national policy and to ensure communication between local and central authorities.

The Ministry of Health produced a National Health Strategy that was adopted by the Council of Ministers in 1995. This broad policy document contained little detail on how plans might be implemented (*10*). A new policy document of the Ministry of Health and an action plan for implementation of a health strategy is being prepared with the support of WHO (*13*).

The Ministry of Health theoretically has the power to regulate all health care facilities in the country, even those owned by other ministries and by local governments. The health care system suffers from a lack of coordination between central government and the regions. Also, regulation is not strong since standards and regulatory means have not been established. The Ministry of Health has set up an accreditation body to map, regulate and accredit hospitals. This is being used as a means of rationalizing the hospital network. The 1999 Law on Health Establishments also foresees accreditation for outpatient facilities. These would become diagnosis and consultation centres with more than ten different specialities and possessing at least one medical laboratory as well as X-ray equipment. Guidelines were set in 1994 for staffing levels for a health care facility based upon its population catchment area but these remain 'indicative' rather than required.

The Ministry of Health directly runs its national institutions, administers other services through its 28 regional health centres, and through hospital directors appointed by the regional centres and in cooperation with the municipalities. The municipalities as the owners of most health facilities have yet to develop their management capacity. Managers of health facilities have little financial discretion since budgetary allocations from the municipalities are earmarked. The 1999 Law on Health Care Institutions allows health care institutions to convert themselves into legally and financially self-governing entities with managerial autonomy. The Health Insurance Fund, when fully underway by 2001, should also provide new planning and regulatory levers. The respective powers of the various bodies have yet to be defined and worked out in practice. Such issues include the extent of central regulation by the Ministry of Health, the extent of autonomy of the self-governing health facilities, the extent of autonomy of the National Health Insurance Fund, and the extent of responsibility of the municipalities for the health of their populations.

Decentralization of the health care system

The Bulgarian health care system was highly centralized and some decentralization has taken place since 1991. First, ownership of most health care facilities was *devolved* to locally elected municipalities from 1995. Following a 1997 amendment to the Law on Health, health facilities can become independent juridical entities. Second, the Ministry of Health *deconcentrated* much administration to the 28 regional health centres in 1995, which has allowed a flatter management structure. Third, there has been extensive *privatization* of pharmacies. Also, since 1991 the previously monopolistic State Pharmaceutical Company has been transformed into 28 separate state-owned companies. The Ministry of Health retains central control of national-level institutions.

Some responsibility for monitoring standards has been delegated to professional associations in the Law of Professional Organizations. These organizations are responsible for observing professional ethics and rules for good medical practice, and for further education. They also participate in the preparation of the National Framework Contract under the 1998 Health Insurance Law.

The health insurance scheme will provide the means to decentralize management through contracts between the regional health insurance funds and health care providers from January 2000 onwards.

Health care finance and expenditure

Main system of finance and coverage

The health care system is financed mainly from general taxation from two main sources: the national budget and municipal budgets. Income tax and social insurance contributions (the latter split between employer and employee) are deducted by employers but the amount of revenue collected has been limited by the low tax base (given low incomes and high unemployment) and by tax evasion. In 1998, around 55% of state funding came from municipal budgets and 45% from the national budget (Table 4). Comprehensive information is not available on all sources of health care revenue: public, private and external. For example, foreign assistance is substantial, as set out later. Private out-of-pocket payments are also substantial, accounting for perhaps over 20% of health care revenue (*4*). The 1998 Health Insurance Act will change the system of financing, beginning in 1999.

The 1991 Constitution of the Republic of Bulgaria guarantees the right to health care. The 1973 People's Health Act (1997 amended legislation) states that 'All Bulgarian citizens shall be entitled to access to medical service and to free medical service at public health establishments' (Article 2, 1). The health care system has aimed to provide free comprehensive health care, but in practice patients have increasingly paid for certain goods and services, as discussed later. In future, the Health Insurance Fund, together with the Ministry of Health and other interest groups, will define population coverage and the services that will be covered.

Health care benefits and rationing

Due to lack of resources, health care services are not always available. Fees were introduced gradually by health care providers since 1994 in order to meet

Table 4. Main sources of government finance (%)

Source of finance		1994	1996	1998
Public		98	–	–
	National budget	33	40	45
	Municipal budgets	65	60	55
	Statutory insurance	na	na	na
Private				
	Out-of-pocket	0.5	–	–
	Private insurance	–	–	–
	Other charges	1.5	–	–
External				
	Foreign assistance	–	–	–

Source: Ministry of Health 1995; 1999.
Note: na = not applicable

the funding shortfall, despite concerns about their regressive nature, as discussed later. A decree on medical co-payments (Number 22) allows charges for elective health services. The 1998 Health Insurance law also allows co-payment fees for visits to physicians and dentists and for inpatient care. Ambulatory health care patients have always paid for their own pharmaceuticals but these have become much more expensive with market liberalization and foreign imports.

The Health Insurance Fund has yet to define in detail what services and benefits will be covered and what will be excluded. There has been considerable discussion on 'a basic package' of services as defined by the state, the implication being that the services outside this package will have to be paid for by consumers.

Complementary sources of finance

Out-of-pocket payments

Informal payments by patients for health care goods and services were common in Bulgaria during the 1980s, as in other central and eastern European countries, although not officially sanctioned by the communist authorities. Such payments became increasingly common during the 1990s. In a survey conducted in Bulgaria in 1994 among 1000 respondents, 43% reported having paid cash for officially free services in a state medical facility in the preceding two years (*4*). A survey in Sofia in 1999 found that 54% had made informal payments for state services (*6*). Unofficial payments (under-the-table payments) were widespread in order to obtain drugs in hospitals, to get access to elective surgery

and for a wide variety of outpatient services. Nearly two thirds of respondents were in favour of the introduction of a range of official user fees. Luxury 'hotel' services while in hospital (such as single room and TV sets) have always incurred charges. People also were in favour of charges for outpatient pharmaceuticals (except for children and some other categories of patients), balneotherapy, dental care, cosmetic surgery, abortions, infertility treatment and eyeglasses.

The scope of these payments and their importance to the reduced health sector budget led the government to legalize cost sharing in 1997. A legal co-payment was introduced for medical services, and for outpatient or inpatient care without referral from the family doctor. A unified tariff of co-payments was drawn up by the Ministry of Health in 1999. Co-payments are recognized in the Health Insurance Law and will be implemented in the contracting process. There are no reliable estimates, however, on the extent of out-of-pocket payments for health care, the size of their contribution to total health revenue, or whether 'under the table' payments are still widespread. The largest share is for drugs, then dental care, next informal payments, while co-payments form the smallest share (*6*).

Voluntary health insurance

Voluntary health insurance so far is limited in Bulgaria, being taken out only by high income groups. Under the Health Insurance Act, voluntary health insurance can provide extra insurance (to be 'bought') on a voluntary basis by any individual. Beyond the basic package, citizens will be free to buy different insurance packages on the market at their own expense. Private insurance will also be allowed to cover those services included in the basic package and are negotiated by the National Framework Contract. Voluntary Health Insurance funds are also legally able to own hospitals and pharmacies.

Other sources of funding

Hospitals were tapping additional sources of funding by charging a fee (for example, for a more comfortable room) which was directed into an extra-budgetary account, which the hospital director could legally use for a number of purposes. The 1999 State Budget Law now forbids extra-budgetary revenue so that health facilities cannot now divert funds into accounts kept separate from general operating revenue.

Voluntary charitable donations by individuals, firms and foundations are also made, usually to hospitals, but probably contribute only a small amount of revenue.

Foreign assistance is substantial such as World Bank grants and through European Union programmes such as PHARE, TEMPUS and INTERREG. Bulgaria has received 40.5 million Euros of assistance to the health care sector. The major areas of support under the PHARE programme are as follows:

- emergency medical aid – 28 regional centres have been established, staffed with medical and paramedical personnel and equipped with ambulances;
- training of physicians in the primary health care network – over 1600 physicians have been trained in two-month courses in General Medicine at four regional training centres;
- improving university education in General Medicine – chairs were established in the five medical universities; teachers were trained and documentation centres were set up;
- supporting the introduction of private medical practice – proper legislation, accreditation, quality and fiscal aspects have been developed;
- training of hospital management staff – over 350 directors and chief nurses were trained in two-week re-qualification management courses. 28 people obtained a two year diploma;
- training of leading administrative personnel – Ministry of Health and local authorities staff were trained on health economics, organization and computing. A Health Economics and Policy Analysis Unit was created within the Ministry of Health.
- introduction of Public Health specialists – eight people were sent for two-month training in European Union countries in health promotion, health legislation, medical ethics, environmental preservation, epidemiology and medical statistics. Guidelines for introducing public health to undergraduate training of medical students have been produced;
- training of nurses in the area of health care management – a faculty has been created at Sofia Medical University (first batch of students admitted in 1995). Courses for chief nurses following European programmes and carried out by European trainers were held;
- National Family Planning Programme – cooperation between government and nongovernment organizations was established. Thirty family planning information centres have been set up;
- improving the system of occupational health and workers' health care – a national policy for safety and health at work has been approved and a draft law prepared;
- restructuring the pharmaceutical sector and introducing a new drug policy – a National Inspectorate was established. An independent quarterly bulletin

is distributed free to 2500 clinicians. A Drug Policy Department was set up within the Ministry of Health;

- supporting the creation of a health insurance system – during the first part of this project a methodology for financing hospital resources was devised and is now being applied to 11 hospitals, in support of the health insurance system introduction;
- support to medical libraries – the five medical universities' libraries now function with automated catalogues and databases. A computer network has been set up linking the libraries to the Academic Telecommunications Network. In 1994–1996 libraries have subscribed to 747 medical journals and 1182 medical books have been supplied;
- a Local Youth Health Education project was developed in collaboration with the English Health Education Authority.

The TEMPUS programme has included several public health workshops and short courses in Bulgaria, masters' degree scholarships, staff development visits, and textbook translations.

A US $47 million fund loan agreement for financing a health sector restructuring project was ratified in Bulgaria in 1996. This is financed by the World Bank (US $26 million), Council of Europe Social Fund (US $11 million), European Union PHARE (US $2.3 million), and the remaining US $7.7 million by the government of Bulgaria. The project will last until 2001, managed and coordinated by the Ministry of Health. The project has four components:

- Health policy and management: financed through a PHARE Programme for training administrative personnel involved in decentralizing the health system, has contributed to capacity building within the Ministry of Health and the health sector as a whole;
- Primary health care: pilot municipalities have been identified where single and group practices will be tested. Equipment has been defined to be funded by UNICEF. Short-term educational courses (20 seminars of 10 days each) will start immediately;
- Emergency Medical Services: ambulances and equipment have been purchased for 21 centres. Doctors, medical auxiliaries and drivers have been or are currently being trained.
- Blood Transfusion: five regional blood transfusion centres (Sofia, Plovdiv, St. Zagora, Varna and Pleven) have been defined. Necessary repair works will be performed.

A PRHD Japanese Grant (US $470 000) has been extended to support the implementation of National Health Insurance.

The United States Agency for International Development (USAID) and the German Government-sponsored TRANSFORM programme have also actively supported the process of reform, mostly in the area of financing and establishing the Health Insurance Fund. Several other bilateral cooperation organizations have also provided help.

The World Health Organization provides continuous support through a WHO Liaison Officer. Technical support has concentrated upon providing policy advice in the following priority areas:

- health policy development and health care reform
- women and children's health
- infectious diseases
- non-communicable diseases and health promotion
- environment and health.

Health care expenditure

Health expenditure in Bulgaria as a percentage of GDP dropped from 5.4% in 1991 to 3.4% in 1998 (Table 5). The health sector has struggled to maintain its share of government spending given other government priorities. It was 11% of total government expenditure in 1998. In 1997, Bulgaria spent 3.5% of GDP on health (or 4.7% according to some sources), which was lower than the European Union average of 8.5% (Fig. 3 and Fig. 4). Bulgaria spends less than other central European countries, such as Croatia, Czech Republic and Hungary, but similar to Poland (which until 1999 also had a tax-based health care funding system). This proportion of GDP is higher than might be expected of Bulgaria with its economic difficulties. Municipal budget cuts have also meant less money for health services throughout the 1990s.

In real terms (taking inflation into account) the government annual health budget since 1995 has been less than half its 1990 level, and dropped to a low of 26% in 1997 (Table 5).

Current per capital health expenditure figures for Bulgaria in (purchasing power parity) PPP US $ are not available in a time series, but the 1997 figure was estimated at PPP US $150 (*13*). This is much lower than the European Union average of US $1743 (Fig. 5).

Pharmaceutical expenditure has nearly doubled as a proportion of government health spending from 12.3% in 1990 to 23.75% in 1998 (Table 6).

Pharmaceutical costs have risen dramatically with the rise in prices and especially with the influx of expensive foreign drugs. The pharmaceutical share of health expenditure is an underestimate since this only reflects government expenditure. Consumers also contribute a substantial amount, as for example, ambulatory care patients pay for their own drugs.

Table 5. Trends in health care expenditure in Bulgaria, 1990–1998

Total expenditure on health care	1990	1991	1992	1993	1994	1995	1996	1997	1998
Value in current prices (million Leva)[(b)]	1 837	5 720	10 664	14 222	21 280	31 842	53 814	599 088[(c)]	686 611[(c)]
Value in constant prices (million Leva)	–	–	–	–	–	–	–	–	–
Value in current prices per capita (PPP US $)[(c)]	–	–	–	–	–	56	37	46	46
Real government health budget as % 1990 budget[(d)]	100	71	74	64	51	47	35	26	41
Share of GDP (%)[(c)]	5.2	5.4	5.3	4.8	3.9	3.7	3.2	3.5	3.4
Share of total government expenditure[(b)]	6.5	7.6	11.5	9.6	8.5	9.4	7.1	10,0[(c)]	11[(c)]
Public as share of total expenditure on health care (%)[(a)]	100	100	100	100	100	–	–	–	–

Source: [(a)]WHO Regional Office for Europe health for all database; [(b)]UNICEF TransMONEE database 3.0; [(c)]Ministry of Finance and Ministry of Health, Bulgaria; [(d)](*4*).

The constraints on the health budget have also meant that less has been allocated to capital investment which has dropped from below 5.8% for most of the 1990s (Table 6). Technology renewal is a major problem since more than three quarters of medical equipment in Bulgaria is said to be over 20 years old (*13*).

Inpatient care takes about 60% of the government budget despite attempts to shift priority to primary health care.

Salaries in most years are below 50% of the government health budget as wages have been held down (*13*). If social insurance contributions are excluded, salaries in 1992–1998 comprised 32–36% of government health expenditure (*14*).

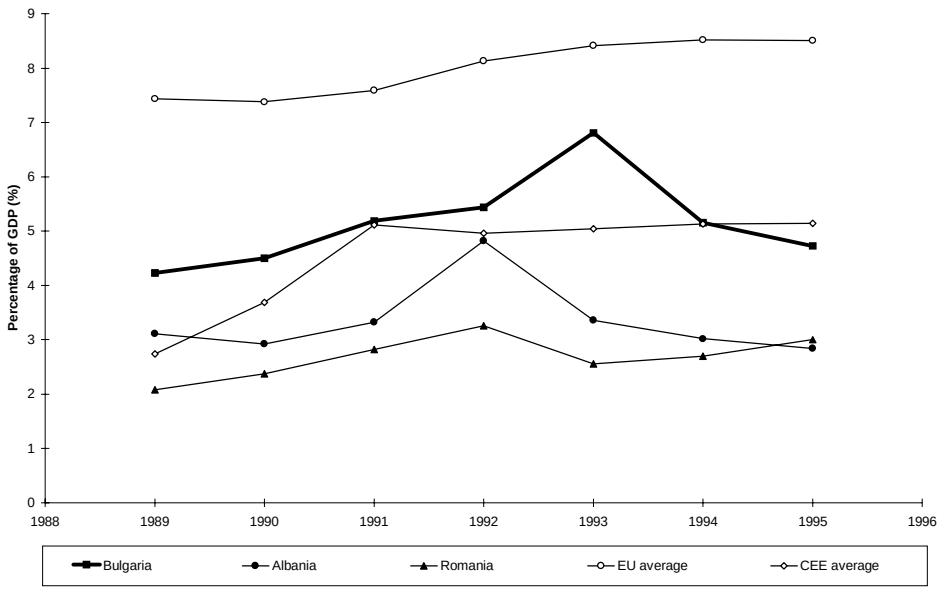
In 1997, about 55% of the State budget was allocated to state-owned health care establishments run by the municipalities. Another 30% was allocated to national health care establishments and to pharmaceuticals and about 15% went to establishments directly funded by the Ministry of Finance, such as medical universities (*13*).

Table 6. Health care expenditure by categories in Bulgaria, (as % of government expenditure on health care), 1990–1998

Total expenditure on	1990	1991	1992	1993	1994	1995	1996	1997[(b)]	1998[(b)]
Inpatient care (%)[(a)]	–	–	53	55	57	59	–	—	
Pharmaceuticals (% health expenditure)[(b)]	12.3	15.5	20.5	16.4	17.7	17.4	23.5	23.4	23.75
Capital investment (% health expenditure)[(b)]	5.8	5.4	4.5	3.9	3.8	3.4	2.3	6.8	4.4
Salaries & social insurance (% health expenditure)[(b)]	56.9	48.9	46.8	56.4	51.8	50.6	45.3	42.6	50.49

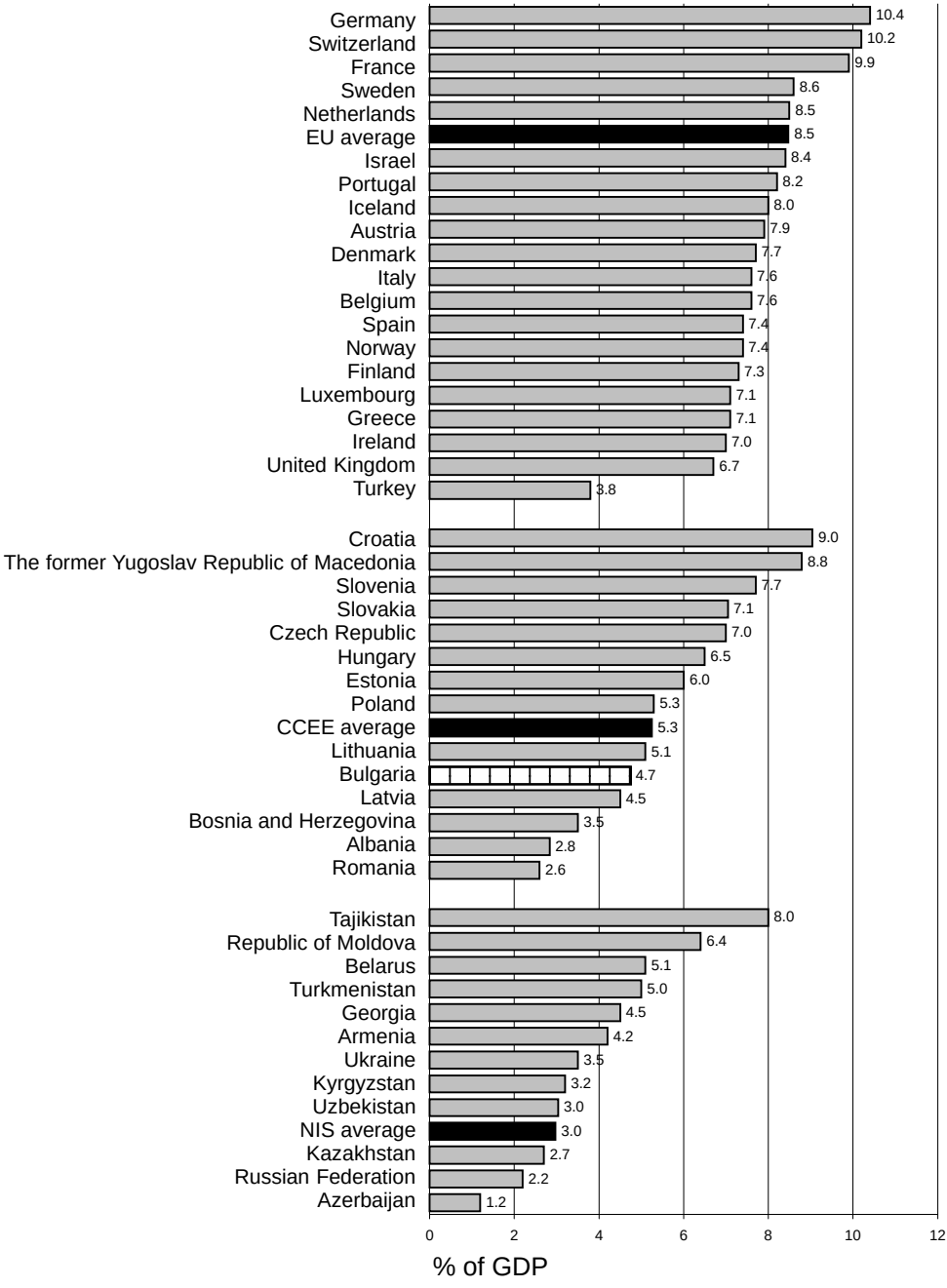
Source: [(a)]WHO Regional Office for Europe health for all database; [(b)]Ministry of Health, Bulgaria.

Fig. 3. Trends in health care expenditure as a share of GDP (%) in Bulgaria and selected countries, 1989–1995



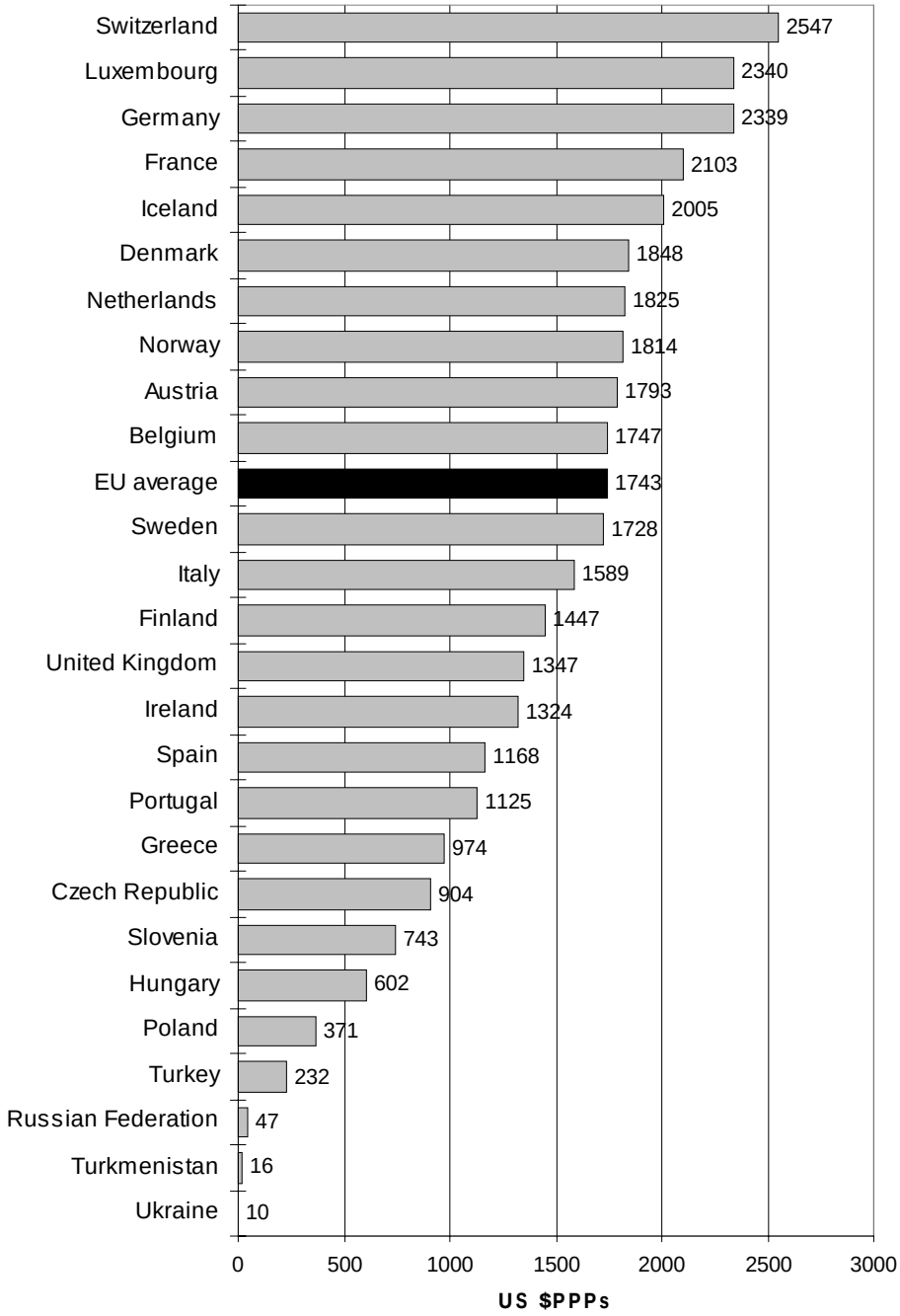
Source: WHO Regional Office for Europe health for all database.

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



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

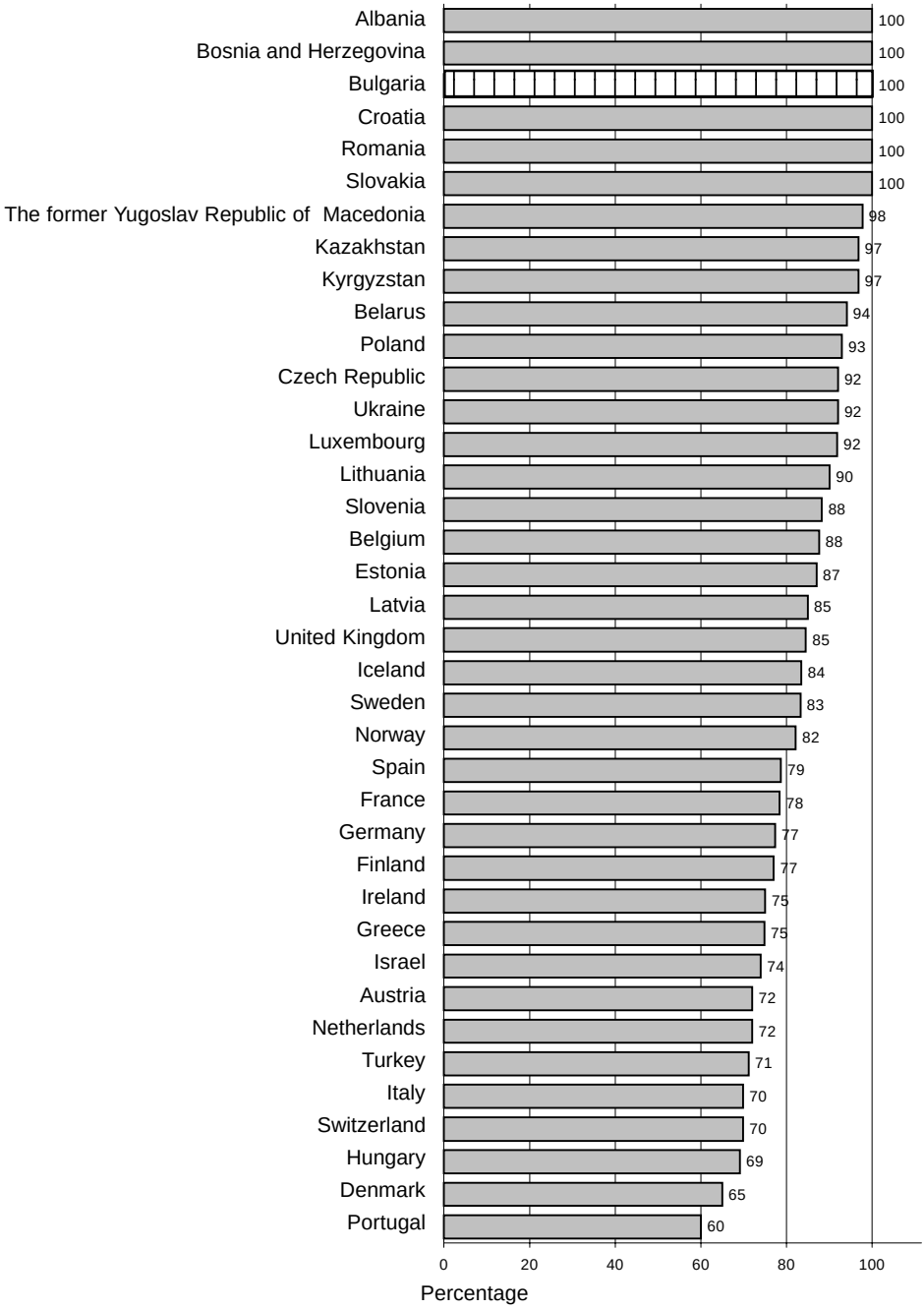
Fig. 5. Health care expenditure in US $PPP per capita in the WHO European Region, 1997 or latest available year



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

Bulgaria

Fig. 6. Public (government) health expenditure as % of total health expenditure in the WHO European Region, 1997 or latest available year



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

Health care delivery system

Primary health care and public health

Primary care and secondary (specialized) ambulatory health care are provided in district freestanding polyclinics and also in hospital-attached polyclinics. It is difficult to distinguish between the primary and secondary levels of care. Both are badly in need of reform and must recover the confidence of their patients. For example, a survey in the early 1990s reported that almost two thirds of patients regarded primary and secondary health care services as 'bad' or 'very bad', with poor standards of care, long waiting times for patients, and a lack of essential supplies (*10*). A survey in Sofia (N=420) found that 77% of health care consumers were dissatisfied with public health care services compared to only 31% of private health care consumers (*6*).

Patients are allocated by their address to district midwives and to four kinds of district based doctors: an internal medicine physician (therapeutist), a gynaecologist–obstetrician, a paediatrician and a dentist. Patients consult one of these and if necessary are referred to a specialist based in a polyclinic or hospital. Patients may also obtain direct access to specialists in case of medical need, but a co-payment was introduced for these cases from 1997.

Primary care facilities

Much primary care until recently was provided by specialists in polyclinics rather than by district physicians. There were 203 polyclinics attached to hospitals in 1995 and another 200 free-standing polyclinics. Polyclinics were divided into five categories depending on their range of services and size of population (*10*). The polyclinics are managed by a medical director appointed by the regional health centres of the Ministry of Health.

The three largest categories of polyclinics serve populations between 10 000 and 40 000. These have a number of physicians and dentists each supported by

nursing and midwifery staff. In addition they have a range of specialists; for example dermatologists, ophthalmologists and neurologists. Some large polyclinics have inpatient beds. Alongside this are diagnostic facilities (laboratory and radiology equipment), physiotherapists and facilities for rehabilitation, and departments for administration. There are also specialist polyclinics (98) for dental care.

The smaller polyclinics serve populations of between 6000 and 10 000 and generally do not have specialists. Below that level, villages are served by a small surgery (about 100 across the country) with a single district physician often assisted by a nurse or midwife. In over 1000 communities, however, there is no doctor and health care is provided by a *feldscher* (nurse practitioner or medical assistant). This fifth level, the small health posts, are supervised by a neighbouring polyclinic.

A parallel system of polyclinics and primary health care facilities are attached to other Ministries and enterprises. The Ministry of Transport, Ministry of Defence and Ministry of Internal Affairs own and administer polyclinics and primary health care facilities.

There were 5.9 physician contacts per person in Bulgaria in 1998 which was in the average range for European countries but low compared to some central and eastern European countries (Fig. 8). This rate has dropped steadily in Bulgaria since 1989 (*19*). The volume of services in the Bulgarian health care system has decreased throughout the 1990s according to several measures: number of patient visits for ambulatory care, preventive check-ups, and hospital utilization rates (*13*).

Issues in primary care

Polyclinics are intended to diagnose and treat common problems and to provide continuing care for certain chronic illnesses. In addition, they are intended to undertake preventive activities and health promotion. In particular, polyclinics have been poor in providing continuing care of chronic illness, and preventive and health promotion activities have been inadequate. Other problems are the absence of a comprehensive information system and poor management. Qualified staff are concentrated in urban areas and there is a shortage of auxiliary staff. Staff are poorly motivated and poorly paid. Furthermore, patients have no choice and few rights.

There is considerable duplication between the primary health care system, school-based doctors, and also occupational health centres run by other Ministries. The proposal is to merge these facilities with local primary care services (*11*).

The gatekeeping role of 'district system' local doctors has largely broken down since patients commonly consult specialists directly, and make under-the-counter payments to secure access.

It has been difficult to persuade physicians to work in rural areas since the system of compulsory placement was stopped and, as a result, some areas rely on *feldschers* for primary care services.

Medical training is excessively specialized and, although some general practice training was established in 1986, it was not popular, and rapidly fragmented into several narrow specialities. District physicians did not have to train in general practice in order to take up their posts. The first fully trained general practitioners (family doctors) will be appointed from 2000.

The main reform in primary care is the move towards a family doctor system from 1998 onwards. Patients now choose their own family doctor. The intention is that family doctors will act as gatekeepers to the rest of the health care system. Patients wishing to consult specialists directly will be obliged to pay a fee.

Family planning services remain under-developed with a consequent high abortion rate.

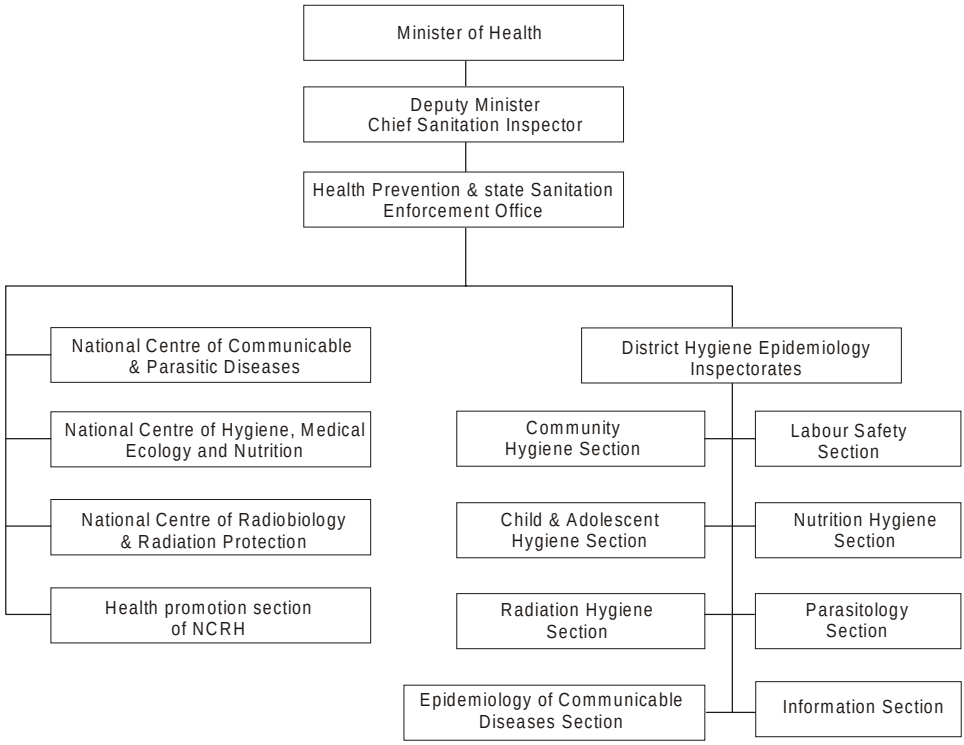
A World Bank project has funded the development of primary health care in selected municipalities. Also, two major PHARE projects were successfully undertaken in the field of primary health care. The first provided district therapeutists with two months training in family medicine in four centres throughout the country, and more than 1600 physicians were retrained. The second project developed university training in general or 'family' medicine.

Public health services

Public health services are organized by the Ministry of Health and are financed from central sources. The system retains the basic structure that existed from the 1950s, when public health concentrated upon eradicating communicable diseases. From 1992 these services have been run from the 28 district (now oblast) hygiene and epidemiology inspectorates rather than from municipalities (Fig. 7).

Hygiene and epidemiology inspectorates still have a large staff, which numbered over 4000 in 1989 (*10*). They are divided into eight departments, each headed by a public health physician. The 28 district inspectorates have laboratory facilities. The larger inspectorates also have departments for public health, urban planning, and construction. The policy intention is to simplify the structure of the hygiene and epidemiology inspectorates. The former departments of medical informatics have been moved to the district health directorates.

Fig. 7. Organizational chart of the Hygiene and Epidemioplogy Service



Blood transfusion services were extremely substandard with poor technology and storage facilities. Work has begun (with the help of a World Bank grant) to rehabilitate the blood transfusion centres and to improve the supply, quality and distribution of blood and blood products. The service is also hoping to increase the number of blood donors.

Levels of immunization for measles, tuberculosis, diphtheria, tetanus, poliomyelitis, and pertussis, according to the data supplied to WHO, have mostly remained above 95% during the 1990s (Fig. 9). But the lack of funds for capital investment and maintenance of public facilities has produced new problems for public health. For example, in the winter of 1994–1995, problems with the water supply in Sofia contributed to outbreaks of communicable diseases, such as dysentery and salmonella, which previously had been successfully controlled. Tuberculosis rates have begun to rise again with 41 cases per 100 000 population in 1997.

The National Centre for Health Promotion was created in 1991. In 1998 it became a section of health promotion and health prophylactics of the National Centre of Public Health, directly subordinate to the Deputy Minister of Health for the hygiene and epidemiology service. This Centre and the 28 hygiene and epidemiological inspectorates throughout the country carry out health education. The emphasis under the Soviet Semashko model was upon disease surveillance, so that it has been difficult to add activities intended to promote health and healthier lifestyles. The national health strategy calls for better intersectoral collaboration with coordinated national programmes.

The Bulgarian National Environmental Health Action Plan (NEHAP) was adopted in 1998, and the interagency plan will be coordinated by a task force within the Ministry of Health.

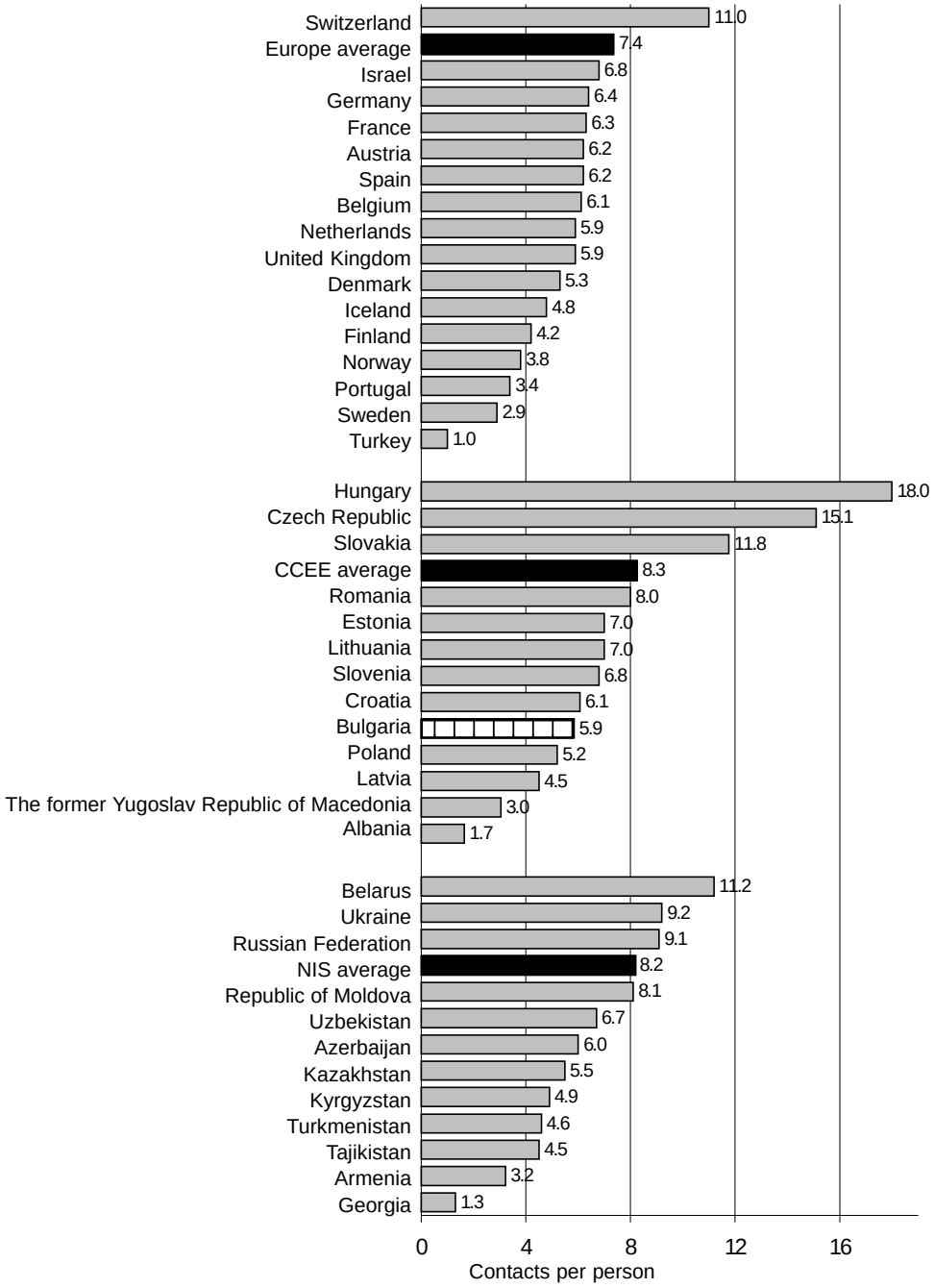
Secondary and tertiary care

Bulgaria has an extensive system of specialized hospital services, like other former Soviet model health care systems. Bulgaria has concentrated more resources in hospital care than its neighbours and this level of expensive and inappropriate health care cannot be sustained. Despite its restricted budget, Bulgaria has a much higher ratio of beds to population than most countries in Europe.

Hospital beds have continued to rise during the 1990s. In 1997, Bulgaria had 10.5 hospital beds per 1000 population (Table 7), which was among the highest in the central and eastern European region (Fig. 10). The population proportion of beds in Bulgaria increased between 1990 and 1996 in contrast to most other countries. The Bulgarian figure has been high since the mid 1980s compared to its neighbours such as Albania (which is very low) and Romania (Fig. 11), and compared to the European Union average, which was 7.3 beds in 1996. It should be noted that many hospital beds in Bulgaria cannot be categorized as acute care beds. The extensive hospital network throughout the country means that most people have access to some kind of inpatient care.

Bulgaria has a large number of hospitals and a large number of specialized hospitals (Table 8). There are 98 municipal hospitals with an average of 227 beds with facilities for surgery, obstetrics and gynaecology, internal medicine and paediatrics. The municipalities also own and finance specialized hospitals for paediatrics and gynaecology. Specialist outpatient care is provided through the polyclinics, financed by municipal budgets. Some polyclinics also have inpatient beds.

Fig. 8. Physicians' contacts per person in the WHO European Region, 1998 or latest available year



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

Bulgaria

Fig. 9. Levels of immunization for measles in the WHO European Region, 1997 or latest available year

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

Table 7. Inpatient facilities utilization and performance in Bulgaria, 1980–1997

Inpatient (b)	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Number of hospital beds per 1000 population (a)	8.9	9.1	9.8	9.8	10.2	10.5	10.2	10.4	10.5	10.5
Admissions per 100 population (a)	17.6	19.3	19.0	18.1	19.1	18.6	17.6	17.7	17.5	15.6
Average length of stay in days (a)	15.2	14.5	13.7	13.9	13.8	13.8	13.6	13.6	13.2	12.9
Occupancy rate – acute hospitals (%) (a)								64	64	62
Occupancy rate – all hospitals (%) (b)	85.7	87.1	77.0	73.4	72.1	70.1	66.0	66.0	63.3	55.3

Source: (a) WHO Regional Office for Europe health for all database; (b) Ministry of Health, National Centre of Health Information, Public Health Statistics Annual, Sofia,1998

The 32 general district hospitals provide a range of specialist services and have on average 874 beds. These hospitals are funded and administered by municipalities or by the Ministry of Health regional health centres.

The national institutes and centres provide tertiary care in cardiovascular medicine, oncology, rehabilitation, infectious diseases, haematology, drug addictions and radiology. These are owned, administered and financed by the Ministry of Health. There are also 12 university hospitals in Sofia and Medical Schools financed by the Ministry of Health and the Ministry of Education. There is also a hospital that treats members of the council of ministers, and several other ministries (defence, transport and internal affairs) own and finance their own hospitals and polyclinics. Specialized dispensaries (oncology, psychiatry, dermatology, sexually transmitted diseases, and tuberculosis) are also located at regional level.

In 1997 there were also 136 sanatoria with 16 066 beds with curative and rehabilitation functions and for physiotherapy (for rehabilitation and for treatment of chronic diseases).

Emergency care is provided in 28 regional centres for emergency care, with patients transferred if necessary to the appropriate inpatient facility. This network is financed and coordinated by the Ministry of Health with assistance from PHARE and the World Bank.

A medical director for each institution is appointed by the Ministry of Health, while at municipal hospital level the director is appointed by the regional health

Table 8. Number of hospitals and beds, 1990, 1993 and 1997

	1990		1993		1997	
	Facilities	Beds	Facilities	Beds	Facilities	Beds
All Hospitals, including:	256	88 027	287	88 910	288	85 408
District Hospitals	29	28 750	30	28 502	32	27 969
Municipal Hospitals	91	24 871	95	25 326	98	22 217
Workers' Hospitals	14	2 777	11	1 246	8	894
Academic Hospitals	1	5 849	13	4 756	12	5 103
Lung Hospitals	14	3 504	15	3 586	14	3 226
Paediatric Hospitals	4	751	4	351	1	130
Maternity Hospitals	4	1 382	4	1 380	4	1 249
Psychiatric Hospitals	15	5 002	14	4 882	15	4 777
Dispensaries	59	4 674	59	4 771	60	4 894
Medical School Clinics	5	5 686	5	4 607	5	5 386
Outpatient Facilities	3 747	1 954	3 723	2 026	3 607	1 546
Other	66	55	101	55	126	–
Sanatoriums	184	22 086	163	19 278	136	16 066

Source: (*12*)

centres and must be approved by the municipality. The heads of each hospital department and the chief nurse form the main tier of management. Management is accountable to a medical council selected by the hospital employees.

The admission rate of around 15.6 per 100 population in 1997 (Table 7) is in the mid-range compared to other European countries (Table 9). The average length of stay in days has dropped slightly from 15.2 days in 1980 to 12.9 in 1997 (Table 7). Statistics on average length of stay in acute care hospitals (only available for some years) were 11.6 days in 1995 and 9.7 days in 1997 (WHO health for all database and Ministry of Health statistics). The occupancy rate in all hospitals and also in acute hospitals was below two thirds capacity (Table 7), which is low compared to western European countries (Table 9).

Changes in the provision of hospital care

There are a number of problems with the hospital sector. First, Bulgaria has an over-supply of hospital beds compared to the western European average. Second, hospitals are not used efficiently, with long lengths of stay and low bed occupancy. Third, some hospitals are in a very poor state of repair, are poorly equipped and suffer from a shortage of essential supplies so that patients are forced to buy basic necessities such as drugs and food. Fourth, facilities and qualified staff are concentrated in urban areas.

Table 9. Inpatient utilization and performance in the WHO European Region, 1997 or latest available year

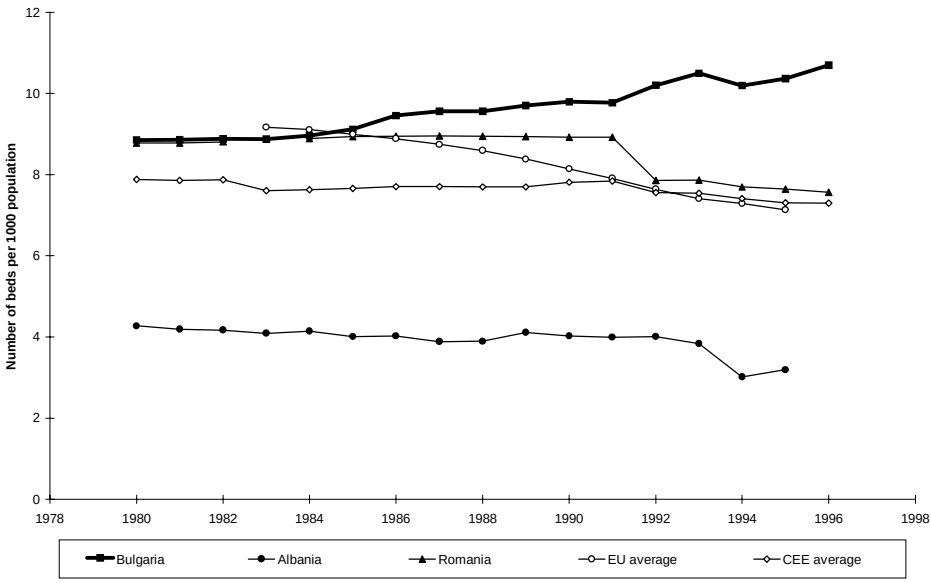
Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Austria	9.2[a]	25.1[a]	10.5[a]	75.1[a]
Belgium	7.3[a]	20.0[a]	11.3[a]	81.4[b]
Denmark	4.7[a]	19.8[b]	7.3[a]	79.1[b]
Finland	9.3[b]	26.7	11.0	74.0
France	10.5[a]	22.8[b]	11.2[a]	75.0
Germany	10.2	–	14.3[a]	79.8[a]
Greece	5.5[a]	15.0[b]	8.2[a]	–
Iceland	10.8[e]	28.0[c]	16.8[e]	70.3[h]
Ireland	3.7[a]	15.1[a]	7.5[a]	82.3[a]
Israel	6.1	19.0	13.0	93.0
Italy	6.1[a]	17.5[a]	9.4[a]	77.4[a]
Luxembourg	11.0[c]	19.4[c]	15.3[a]	74.3[c]
Malta	5.8[a]	–	–	–
Netherlands	5.1	9.8	13.8	64.4
Norway	13.5[c]	15.3[a]	9.9[a]	81.1[a]
Portugal	4.1	11.8	9.3	70.1
Spain	4.3[a]	10.0[a]	11.0[a]	73.9[c]
Sweden	5.6[a]	18.0[a]	7.5[a]	81.9[a]
Switzerland	8.7[f]	15.0[c]	24.5[h]	77.7[c]
Turkey	2.5	6.9	6.1	57.7
United Kingdom	4.5[b]	23.1[a]	9.8[a]	76.2[i]
CCEE				
Albania	3.0	7.7	7.9	–
Bosnia and Herzegovina	4.5[f]	8.9[f]	13.3[f]	70.9[f]
Bulgaria	10.3	17.5[a]	12.9	64.1[a]
Croatia	6.0	14.9	12.9	89.3
Czech Republic	8.8	20.2	12.3	71.8
Estonia	7.4	18.3	10.9	71.4
Hungary	8.3	23.7	11.0	74.4[a]
Latvia	9.7	21.7	12.9	–
Lithuania	9.8	21.8	12.9	–
Poland	6.2[a]	11.6[b]	10.4	–
Romania	7.4	20.9	10.0	–
Slovakia	8.3	19.9	12.1	78.5
Slovenia	5.7	16.2	10.0	77.7
The former Yugoslav Republic of Macedonia	5.2	10.0	13.4	63.9
NIS				
Armenia	6.8	6.7	13.9	36.1
Azerbaijan	9.6	5.8	17.5	–
Belarus	12.4	26.1	15.5	88.7[c]
Georgia	4.5	4.3	10.5	26.8[c]
Kazakhstan	8.4	15.1	16.5	80.8
Kyrgyzstan	8.3	17.5	14.5	83.6
Republic of Moldova	11.3	18.7	18.0	80.0
Russian Federation	11.4	20.6	16.6	87.7
Tajikistan	7.0	11.0	15.0	59.9
Turkmenistan	7.1	13.0	13.4	72.1
Ukraine	9.4	19.1	16.2	85.2
Uzbekistan	6.4	15.8	13.8	–

Source: WHO Regional Office for Europe health for all database.
Note: [a] 1996, [b] 1995, [c] 1994, [d] 1993, [e] 1992, [f] 1991, [g] 1990, [h] 1989, [i] 1986.

To address these problems, a process of accreditation of hospitals began in 1997. Substandard hospitals are being closed (for example, some pulmonary and psychiatric hospitals). So far, about one third of municipal hospitals and also one third of regional hospital beds have been closed. The total number of hospital beds was reduced by only 4% between 1993 and 1997 (Table 8), but since then further closures have occurred. Physicians and other staff are being transferred to other working places, but as a second wave of closures gets under way, some hospital physicians may lose their jobs.

There are also a large number of therapeutic spas across the country, which are to be privatized.

Fig. 10. Hospital beds per 1000 population in Bulgaria and selected countries, 1980–1996

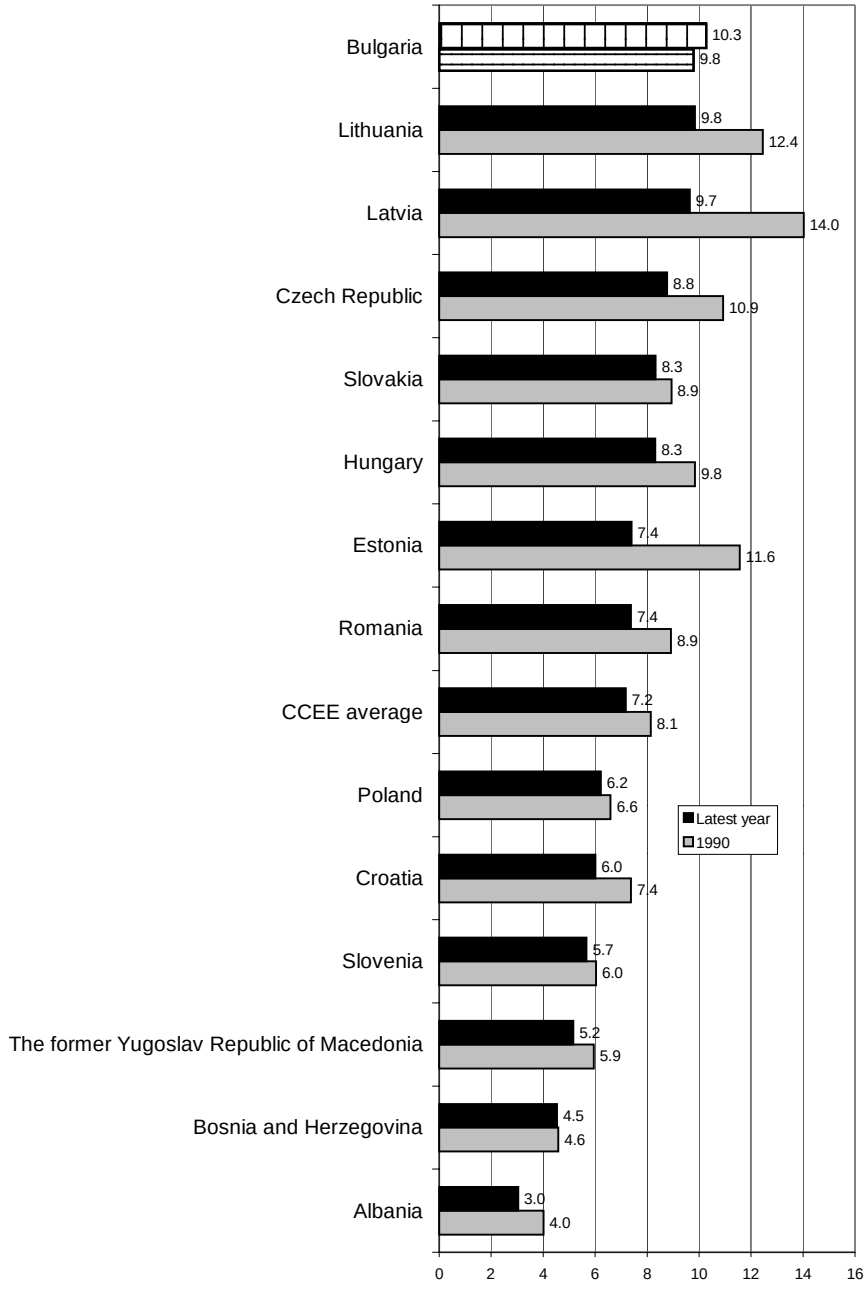


Source: WHO Regional Office for Europe health for all database.

Social care

Before 1990, social care was the responsibility of the Ministry of Health and Social Welfare, although not a high priority, and since then of the Ministry of Social Welfare and local social welfare departments, financed from state and

Fig. 11. Hospital beds per 1000 population in central and eastern Europe, 1990 and latest available year



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

Bulgaria

municipal budgets. The Ministry of Health, therefore, is not involved in funding social care. The number of social facilities has increased. A voluntary welfare sector is becoming established with the growth of nongovernment organizations, some funded by international organizations.

In 1997, there were 199 social homes and facilities providing 50 596 places. This included 65 homes for the elderly, 30 for the physically disabled, 49 for the mentally disabled and 35 for children with mental and physical disorders. Residential homes provide social and medical care for elderly and chronically ill people who can no longer stay with their families. Nursing homes are intended for elderly persons and those with chronic illnesses. The medical staff generally are appointed by polyclinics or hospitals, and nursing staff are appointed by the director of each social facility. As in the rest of eastern Europe, however, families are mainly responsible for the care of dependent family members.

There are different forms of community care intended for those on low incomes, the elderly and the disabled. These people receive some financial support and some help in kind (for example, help towards household costs and maintenance and provision of free food).

All these forms of social and community care are financed from municipal budgets. Residents often pay part of their pensions to cover the costs of care in these institutions. Regional centres for social care supervise social activities. They determine the number of staff appointed and also appoint the directors of social facilities.

Legislation for the social integration of disabled people has been agreed but not yet fully implemented. The government recently created a special central fund to finance the rehabilitation and social integration of the disabled.

Human resources and training

Doctors are trained at five universities (Medical Universities in Sofia and Varna, and Medical Schools in Plovdiv, Pleven and Stara Zagora). These were part of a national academy of medicine until 1991 but now function more independently, under both the Ministry of Health and the Ministry of Education. Each university has three faculties: medicine, dentistry and pharmacy. Medical training takes five years and the curriculum was recently reorganized to include 90 hours of teaching in family medicine. After medical school, graduates undertake one year of practical experience and then sit a state exam. Doctors register their medical qualifications with the Ministry of Health and are then issued a licence to practice by the Centre for Postgraduate Training of Sofia Medical University.

The Higher Medical Council of Bulgaria has approved new three-year curricula for postgraduate specialization, undertaken in a hospital approved by the Department of Postgraduate Education in the Ministry of Health. Trainees sit examinations at the end of each year and a final examination on completion. One of the postgraduate programmes will be in general medicine. The intention is to bring family medicine training in line with European Union countries. With help from the PHARE programme, a one-year family medicine course for specialists in general medicine is currently being offered. Retraining for specialists who wish to become family doctors will be offered as an eighteen-month course, and as a six-month course for those who trained in district practice under the old system. In the meantime, practising district doctors are to be retrained as family doctors in eight-week courses.

No national strategy has been developed as yet to plan human resources and to improve education and training. The general view is that there is an over-supply of doctors but an under-supply of other qualified health care staff. The government in 1997 decided upon a 10% reduction in staff followed by a 30% cut in hospital staff over five years, primarily through early retirement and transfers (*13*).

Bulgaria had 3.5 doctors per 1000 population in 1997 (Table 10 and Fig. 12). This is higher than the central and eastern European average of 2.5 and the European Union average of 3.0. The number of physicians (physical persons) in the health sector has remained fairly stable (Table 11). The actual numbers of medical graduates have increased. In the early 1990s, some restrictions were placed upon the number of medical students. The Ministry of Health tries to limit the number of admissions for medical studies and postgraduate qualification on different specialities (except General Medicine) on the basis of forecasted needs.

Bulgaria is in the mid-range of countries for nurses with 5.7 certified nurses per 1000 population in 1997 (Table 10, Fig. 13). Nurse training is in the process of being upgraded in 13 colleges, which offer a range of courses for health care professionals. Until 1996 all nurses underwent two or three years training after completion of secondary-level education. With support from a PHARE project, colleges for nurses now offer a bachelor degree in nursing. After training in general nursing, nurses undertake specialization (for example, in midwifery and psychiatry). Nurses also acquire experience and training from their employer hospitals.

There is no formal programme in health services management. The medical directors of hospitals tend to be trained in social medicine. With the support of the PHARE programme, some people have attended short courses in epidemiology and also health system management in European Union countries.

Salaries of health sector staff are low, in common with other countries with a Soviet health care system. Physician salaries were lower than skilled industrial workers but have now been increased to an average public sector salary. Health care professionals expected a better deal under health sector reforms, and low salaries combined with little professional power, have produced low morale.

Table 10. Health care personnel, population ratio, Bulgaria, 1980–1997

Per 1000 population	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Physicians	2.46	2.86	3.17	2.98	3.17	3.36	3.33	3.46	3.54	3.45
Dentists	0.55	0.64	0.68	0.66	0.67	0.68	0.66	0.65	0.66	0.63
Certified Nurses	6.85	7.40	7.67	7.22	7.53	7.77	7.62	7.68	7.72	5.71
Midwives	0.89	0.87	0.84	0.81	0.82	0.81	0.80	0.79	0.79	0.71
Pharmacists	0.41	0.47	0.49	0.36	0.31	0.28	0.25	0.22	0.22	0.19
Physicians Graduating	0.15	0.17	–	–	–	–	–	–	–	–
Nurses Graduating	0.55	0.13	0.16	–	–	–	–	–	–	–

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

Table 11. Health care personnel, numbers in public sector, Bulgaria, 1990–1997

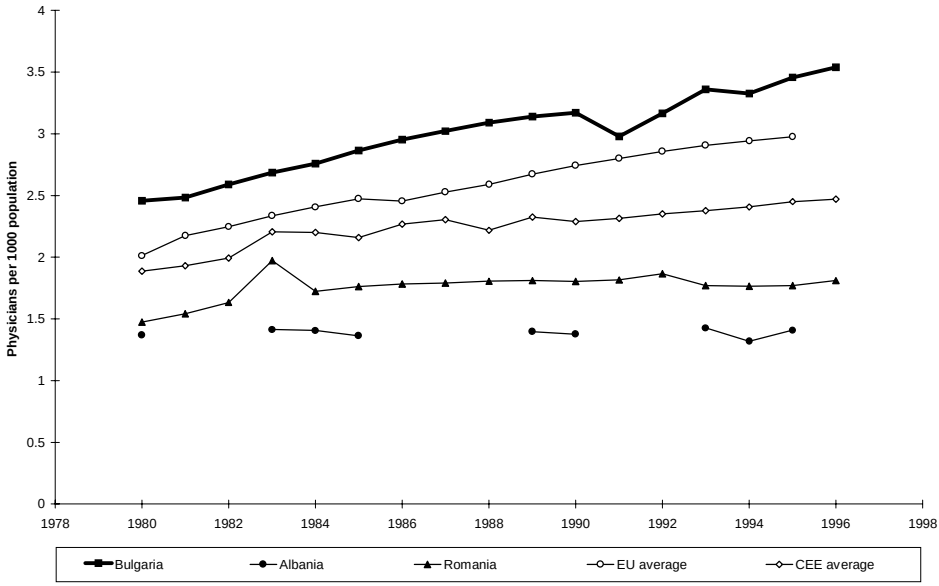
Staff	1990	1991	1992	1993	1994	1995	1996	1997
Physicians (a)	28 497	26 760	27 039	28 457	28 094	29 069	29 592	28 655
Dentists (a)	6 109	5 899	5 705	5 727	5 540	5 481	5 493	5 240
Certified Nurses (b)	53 180	50 480	50 230		50 773	51 035	51 109	47 434
Midwives (a)	7 544	7 252	7 021	6 903	6 720	6 652	6 565	5 923
Feldchers (b)	7 617	7 119	7 015		6 862	6 885	6 886	5 888
Pharmacists (a)	4 366	3 234	2 667	2 376	2 075	1 882	1 819	1 588
Technicians (b)	14 551	13 156	12 956		12 506	12 372	12 251	11 071
Others (b)	4 865	4 099	4 160		4 543	4 819	4 832	4 471
Total (b)	127 359	117 999	116 793		117 113	118 195	118 547	110 270

Source: (a) WHO Regional Office for Europe health for all database, (b) National Centre for Health Informatics.

Pharmaceuticals and health care technology assessment

Until 1991, the system was fully centralized (under the umbrella of the State Pharmaceutical Company) and covered all functions, including a network of pharmacies and sanitary supply shops, specialist warehouses and depots,

Fig. 12. Physicians per 1000 population in Bulgaria and selected countries, 1980–1996



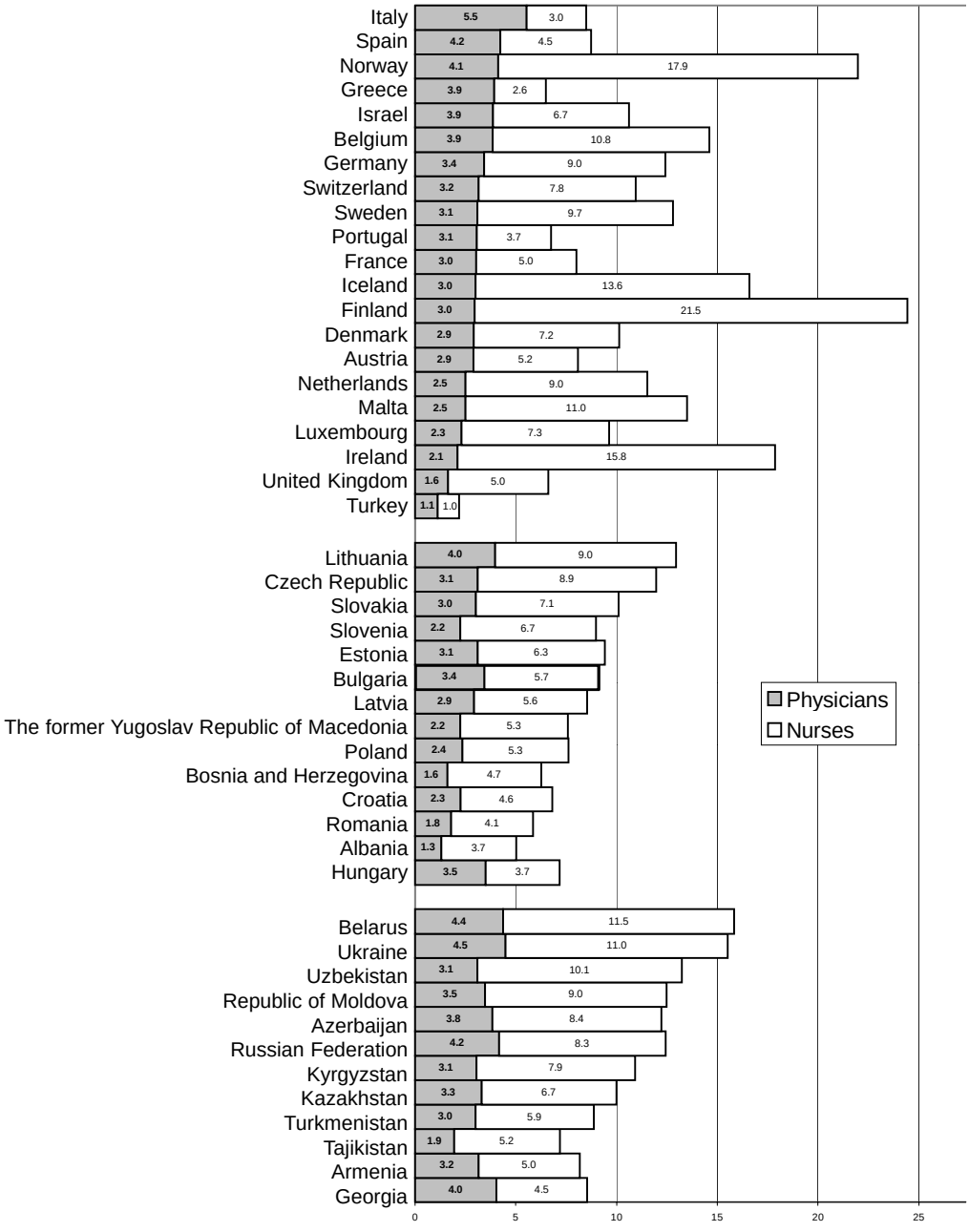
Source: WHO Regional Office for Europe health for all database.

importers and distributors of medicinal drugs and sanitary supplies. The transition to a market economy involved breaking up this monopoly. There are now 28 separate state-owned companies dealing with the production, supply and distribution of pharmaceuticals, some of which are in the process of being privatized. In 1999, there were 78 Bulgarian producers of pharmaceuticals.

The trading company, *Pharmachim*, has preserved its exclusive authority of securing product certificates abroad. About 300 private importers and distributors of medicinal drugs had registered by 1997. The state retains some 804 of the previous (1991) total of 1220 pharmacies, while another 1662 new privately owned ones have been registered. Chains of pharmacies have been established, some of them owned by foreign companies.

Private pharmacies must be licensed by the Council for Pharmaceutical Affairs in the Ministry of Health. Privatization has improved the supply of drugs and the consumption of pharmaceuticals has increased – whether this be appropriate or inappropriate use.

Fig. 13. Number of physicians and nurses per 1000 population in the WHO European Region, 1998 or latest available year



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

The number of imported drugs has increased and the market share of domestically produced medicines has decreased from 90% in 1987 to 60% in 1997. In 1997, the imported drugs bill amounted to US $30 million (L 66 162 million). Some 25 companies are the main producers of foreign imported drugs, including Novo Nordisk (19.5% of imports), F-Hoffman-La Roche (5.4%), Janssen-Cilag (5.3%), Biochemie (4.8%) and Bayer (3.9%).

Most drugs are paid for out-of-pocket by patients at market prices. Some expensive drugs are paid for by the Ministry of Health such as cancer chemotherapy, cardio stimulators and other life saving drugs. Drugs for certain chronic illnesses are subsidized and certain categories of patients (children, veterans from wars) receive free drugs. Reimbursement is based on a list of reference prices drawn up by the Ministry of Health and patients have to pay the excess.

In 1995, the Bulgarian Parliament passed the Medicinal Drugs and Pharmacies Act. The National Institute for Drugs, under the Ministry of Health, registers and controls medical drugs and issues licenses for trade in medicinal products. The new amendments to this law foresee the transformation of the National Institute for Drugs into an agency for the registration and control of medicinal drugs.

Total health expenditure on drugs is substantial although the amount spent by consumers is unknown. In 1997, drugs accounted for 24% of government expenditure (see Table 6), which excludes the very substantial out-of-pocket spending on drugs by patients. A national schedule of essential drugs is being discussed. There are no mechanisms at present to control prescribing or to improve prescribing practice.

There is no mechanism for technology assessment or for controlling the introduction of new technology into the health sector. At present decisions on the purchase of new equipment are left to the municipality. This is a crucial area for regulation (especially in hospitals), as is being done in European Union and OECD countries, given the rapid introduction of new diagnostic and therapeutic technologies.

Financial resource allocation

Third party budget setting and resource allocation

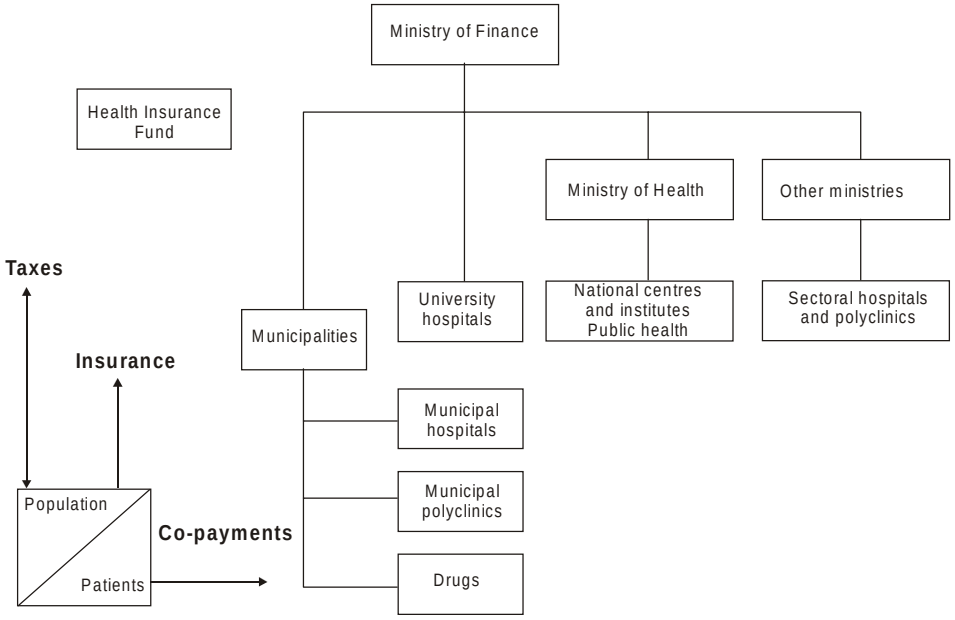
Municipalities raise their own revenue through local taxes. Central government also allocates additional subsidies to the municipalities on the basis of 26 criteria such as local income, population, and health care and hospital activity. Until recently, most funds were based on input-related factors (such as the number of beds and staff), not outputs (such as the number of procedures). Funding mechanisms related to outputs (such as diagnosis-related groups) have been discussed but not yet developed.

Municipalities decide on the allocation of resources to sectors and providers. Municipalities on average spend about 33.5% of their budgets on health care but this varies widely. The health insurance fund in future will be involved resource decisions with the state and municipalities. The intention is that the new funding mechanism will be more transparent, since funding flows under the current system are often obscure and non-accountable, with many decisions made in response to political and personal priorities rather than the health care needs of the population. There are, therefore, considerable inequities in the regional distribution of health care funds, which are exacerbated at the local level by variations in municipal budget revenues (*5*).

Payment of hospitals

Hospitals and other provider organizations, such as polyclinics, are allocated an earmarked budget divided into separate budget lines for salaries, drugs, food and other uses. Managers cannot move money from one budget line to another and there is little incentive to manage the budget more efficiently. The allocation of resources to hospitals is mainly on a historical basis, as municipalities have maintained their previous pattern of provision. There are few incentives to manage more efficiently and few cost control mechanisms.

Fig. 14. Financing flow chart



Amendments to the Law on Health (1997) have enabled health care facilities to become juridical entities. This status will be confirmed under the new Law on Health Care Institutions (approved in 1998 by the Council of Minister and pending parliamentary approval).

Under the 1998 Health Insurance Act, hospitals can be paid according to a national framework contract with locally negotiated variations. Inpatient care will be reimbursed based on diagnosis-related groups (DRGs), and these pricing instruments are being developed. The National Centre for Informatics has been gathering, analysing and publishing information on health service unit costs. Outpatient specialists are to be paid on a fee-for-service basis.

Payment of physicians

Physicians are paid a salary fixed by collective national bargaining for each sector. In communist times, physician salaries were lower than for many industrial workers. Physician salaries have since risen to about average for

workers in the public sector, but are still lower, in relative terms, than the remuneration expected by physicians in western European countries. Since the late 1980s, physicians have been permitted to engage in private practice. Some work as private practitioners in public facilities outside of their usual working hours and so increase their earnings.

Under the terms of the 1998 Health Insurance Act, family doctors will be paid according to a national framework contract with locally negotiated variations. This will be phased in from January 2000. Patients will be free to enrol with a family doctor of their choice. The remuneration will be based on capitation (the number of patients enrolled with their practice) plus a fee-for-service component (fee per visit). In terms of legal status, family doctors will be independent contractors rather than civil servants.

Health care reforms

Three major reforms are being implemented in the health care system. First, the Law on Health Insurance was passed in June 1998, which will change the financing of health care. Second, the provision of primary care is being reorganized. Third, the network of hospitals is being rationalized and the number of beds reduced.

The health insurance system

Various health insurance models were debated throughout the 1990s. The Act on Health Insurance passed in June 1998 allows for the scheme to be phased in between 1999 and 2001. The National Health Insurance Fund is a single statutory insurer and contributions are compulsory and based on a payroll tax. The management board is answerable to Parliament. Parliament must approve the budget of the fund and the payroll tax contribution rate. The board was set up in January 1999 and members have a four-year mandate. It consists of 18 state appointed members, 18 members of the insured population (six elected on a district basis and six trade union representatives) and 18 representatives of employers. The mayor of Sofia City was appointed as a chairman, a managerial executive was elected, and an executive director selected on a competitive basis. The fund has 28 regional offices (alongside the regional health centres that are the administrative arm of the Ministry of Health).

Under this scheme, insurees pay a percentage of their gross income, with contributions divided equally between the employer and the employee (currently 6%). Insurees pay an additional percentage of their income to cover other dependent family members. The self-employed pay their own insurance contributions. Contributions for others not in the mainstream workforce (such as pensioners) are paid from the national budget, while others (such as the unemployed) are paid from municipal budgets.

The contributions will be collected in parallel with other social security insurance and paid into a fund controlled by the National Insurance Institute. The fund will have a number of separate budgets: the main fund, a reserve fund, a fund for administrative costs and a small sum for capital investments.

A basic package of services and projected expenditures (mainly recurrent clinical health care) is being defined within the revenue capacity of the Health Insurance Fund. This is being negotiated between the various stakeholders and the health insurance fund. A package of services for primary health care (mainly family doctors) has been agreed, a package for specialized ambulatory care is in preparation, and a package for hospitals will be proposed in the year 2000. These are negotiated by the Ministry of Health with the National Health Insurance Fund according to the National Framework Contract. Health care providers will be paid on the basis of contracts with regional health insurance funds. This will begin from 2000 for primary and outpatient health care and from 2001 for hospitals.

The government (central and municipal) will continue to fund emergency care, services for particular groups (such as psychiatric hospital care), expensive treatments (such as for cancer), and population health services (blood transfusions, immunizations, epidemiological research, screening and health promotion programmes, and sanitation control). It will also continue to fund capital investment and health education. Supplementary insurance will be available for health care that is excluded from this package. Health care consumers will continue to make co-payments for most drugs and health services.

Reform of primary care

Primary care reforms place greater emphasis on family medicine and the role of the family doctor as a gatekeeper. Primary care doctors are being re-trained. Further, clearer functional divisions are to be established between primary and secondary care, and between outpatient and inpatient care. Primary care physicians after the year 2000 will be paid mainly on the basis of patient capitation funds through the National Health Insurance Fund.

Hospitals

The hospital network will be rationalized and those hospitals which are underused or in a very poor state of repair will be closed. Hospitals will continue to be owned by the municipalities, which remain responsible for maintenance of facilities.

Aims and objectives

The goals to be achieved by the health system reform in Bulgaria are expressed in a draft policy agenda (*12*):

- *A public/private mix of services to ensure quality of care*. Private health sector development will continue despite the recognized inherent problems, with the intention of promoting higher quality of care and improving freedom of choice. A structure similar to the European public/private mix of services should be achieved in the new health system;
- *Efficient self-government*. Current input-related funding of facilities perpetuates imbalances between areas and institutions. At the same time, lack of management and low flexibility make it difficult to obtain the best out of existing resources. Self-governing institutions should be able to improve allocative ('macro') and internal technical ('micro') efficiency, thus improving cost-effectiveness;
- *System sustainability*. The available resources do not match the amount of services needed. The health care system needs to be oriented towards cost-effective primary health care, which requires a transfer of resources away from expensive hospital services. Health care expenditures have to be sustainable both in the medium and the long-term;
- *Equity*. If proper regulation is not ensured, equity may be at risk. First, some people without insurance may have little or no access even to basic services. Second, the newly emerging private sector could create a two-tier system that would result in higher socio-economic groups obtaining better services;
- *Satisfaction.* At present, satisfaction is low both among doctors (low salaries, bad working conditions, low social recognition) and patients (low quality services, insufficient freedom of choice, 'under-the-table' payments). This creates a barrier against mutual trust that reform will help to overcome. Under the previous communist model, public provision was expected to guarantee quality of care. Standards now must be set and regulatory mechanisms established through mechanisms such as quality assurance programmes and peer reviews.

Reform implementation

Bulgaria has experienced constant crises with the delivery of health services and with health sector funding throughout the 1990s. Nevertheless, some important reforms have been implemented.

Legislation allowing private practice has produced a substantial increase in the number of private doctors, dentists and pharmacists.

The ownership of health care facilities below national level has been devolved to municipalities. The small municipalities, however, lack the revenue base and the management capacity to provide adequate standard health care services.

Primary health care reforms are underway with the training of family doctors. Organizational reforms and the new patient capitation system of financing have yet to be implemented.

Restructuring of the hospital network has begun but the process is far from complete.

The previous communist model of health care had offered universal and free access to a full range of health care services, even if in practice this system began to break down in the 1980s. Over the last decade, however, access to health care services had become increasingly related to the ability of the users to pay (*1*). The introduction of health insurance is intended to restore more equitable access to services.

The health sector remains severely under-funded. The limited public funds available from taxation for the health care system produced considerable pressure to formalize extra sources of funds. The implementation of the National Health Insurance Fund was delayed for several reasons. First, the economic crisis and rising unemployment meant that employers and employees had less capacity to pay payroll tax for health insurance. The success of the scheme will depend in large part upon the collection of insurance contributions. This may be problematic, as it has been in other countries, especially given that the National Social Security Institute has reported a worsening trend in tax compliance (*17*).

The National Health Insurance Fund was established in early 1999 with its 28 regional branches. Beginning from July 1999, health insurance premiums will be collected (3% from employers and 3% from employees). In the next phase, from the beginning of 2000, family doctors and ambulatory care specialists will be paid through contracts with the Fund.

Contracts between a purchaser and provider depend upon a functioning budgeting system and information on unit costs. Contracts between a funder

and provider were required under the 1997 People's Health Act. The format and procedures for these contracts have been based in part upon the UK experience (*8*). The National Centre for Health Informatics has published considerable information on unit costs (*14*). A number of pilot schemes are underway to establish a system to categorize health care procedures by diagnosis related groups (DRG). These projects are funded by PHARE and are taking place in a number of hospitals and polyclinics. New methodologies are being developed for pricing different procedures and diagnosis related groups. Some pilot financial accounting systems have been set up as well as pilot funding contracts between municipalities and health providers. The new insurance scheme will require valid and reliable information on unit costs if meaningful contracts are to be negotiated.

Conclusions

The Bulgarian health care system remained on the periphery of public sector reforms until the late 1990s. The system appeared to be maintaining itself and there were other political priorities given the catastrophic situation in the Bulgarian economy. The numerous changes of government and lack of political will for radical reforms meant that little changed until 1997, when the imminent collapse of the health care system became obvious. The population was overloaded with unregulated payments and a black market for health care services had started to appear.

The Ministry of Health has adopted a strategy for reform based on the principles of equity, cost-effectiveness and quality of care. The first step was made with the adoption of the Health Insurance Law in 1998. A second law, effective since 1998, establishes professional organizations of doctors and dentists (a medical chamber). A 'third pillar' of reform is the 1999 Law on Health Establishments, which outlines real changes in the health care system. The intentions of the new government are to introduce a range of legislation such as on drug policy, patients' rights, food safety, safety in the work place and public health. These provide a glimpse of the future system of health care in Bulgaria. However, 'good intentions' must be followed by policies that include painful and unpopular steps, such as introducing user fees, cutting the number of beds, decentralization and privatization.

An increasing volume of information has been collected since 1992 and much technical and financial help has been received from international donors. Staff (medical, administrative, paramedical) are being trained to manage these reforms. The general principles, and the philosophy of unfamiliar concepts like general medicine, health insurance, health promotion and family planning, have been introduced into medical circles. Many medical providers have begun to show a change in attitude, which will be essential for the success of future changes.

There is broad social support for health care system reforms, although not necessarily for rationing and 'user pays' policies. To maintain the support of the population, therefore, better quality care must be delivered.

A 'step by step' approach to reform was adopted during the years of economic crisis. The paradoxical result of the delay in reforming the health care system is that Bulgaria now has a chance to avoid the mistakes of other countries in Central and Eastern Europe. Now is the time to avoid these pitfalls and to follow a path that leads to better health for all.

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Appendix 1. Legislation and reports

1989 Beginning of democratic transition
1990 Re-establishment of Bulgarian Medical Association and Bulgarian Doctors Union
1991 Constitution of the Republic of Bulgaria
1991 Law for Public Health amendments
1991 Local Self-Government and Local Administration Act
1991 Regulation on medical private practice
1992 Regulation on dentist private practice
1994 Government decree on contracting out
1994 National Health Strategy
1994 Draft Law for Health
1995 Draft Law on Health Insurance withdrawn
1995 Medicinal Drugs and Pharmacies Act
1997 Amendments to People's Health Act
1997 Act on Health and Safe Working Conditions
1997 Decree 22 for the Conditions and Routine for Payments for Health Care of Patient's Choice.
1998 Law on professional organizations of doctors and dentists
1998 Law on Health Insurance
1998 Pharmaceuticals and Pharmacies Serving Human Medicine Act
1999 Law on Health Care Establishments