

Health Systems in Transition

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Health system review

Lidia Georgieva • Petko Salchev
Rostislava Dimitrova • Antoniya Dimova
Olga Avdeeva

Editors: **Olga Avdeeva • Melinda Elias**

Health Systems in Transition

Written by

Lidia Georgieva, *MARSH Bulgaria, Sofia*

Petko Salchev, *Department of Social Medicine and Healthcare Management,
Medical University, Sofia*

Rostislava Dimitrova, *European Parliament, Brussels*

Antoniya Dimova, *Department of Health Management, Medical University, Varna*

Olga Avdeeva, *European Observatory on Health Systems and Policies*

Edited by

Olga Avdeeva, *European Observatory on Health Systems and Policies*

Melinda Elias, *European Observatory on Health Systems and Policies*

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Preface

The Health Systems in Transition profiles are country-based reports that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each profile is produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a profile.

Health Systems in Transition profiles seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe. They are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems;
- to describe the institutional framework, the process, content and implementation of health care reform programmes;
- to highlight challenges and areas that require more in-depth analysis;
- to 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 different countries.

Compiling the profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including the WHO Regional Office for Europe Health for All database, national statistical offices, Eurostat, the Organisation for Economic Co-operation and Development

(OECD) Health Data, the International Monetary Fund (IMF), the World Bank, and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

A standardized profile has certain disadvantages because the financing and delivery of health care differs across countries. However, it also offers advantages, because it raises similar issues and questions. The Health Systems in Transition profiles can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals. Comments and suggestions for the further development and improvement of the Health Systems in Transition series are most welcome and can be sent to info@obs.euro.who.int. Health Systems in Transition profiles and Health Systems in Transition summaries are available on the Observatory's web site at www.euro.who.int/observatory. A glossary of terms used in the profiles can be found at the following web site: www.euro.who.int/observatory/Glossary/Toppage.

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The basis for this edition was the previous profile on Bulgaria, which was published in 2003 and was written by Stayko Koulaksazov, Sveta Todorova, Ellie Tragakes and Stoyka Hristov, and edited by Ellie Tragakes (*1*).

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The current series of HiT profiles has been prepared by the research directors and staff of the European Observatory on Health Systems and Policies. The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe, the Governments of Belgium, Finland, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the HiT profiles is led by Josep Figueras, Director, and Elias Mossialos, Co-Director, and by Reinhard Busse, Martin McKee and Richard Saltman, Heads of the Research Hubs. Technical coordination is led by Susanne Grosse-Tebbe.

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The HiT reflects data available in January 2007.

List of abbreviations

ATC	Anatomical-therapeutic-chemical code
BDA	Bulgarian Drug Agency
BGN	Bulgarian lev
BMA	Bulgarian Medical Association
BMI	Body mass index
BSP	Bulgarian Socialist Party
CD	Central department
CME	Continuing medical education
DCC	Diagnostic consultation centre
DFLE	Disability-free life expectancy
EU	European Union
EU15	The 15 countries that joined the EU before May 2004
EU10	The 10 countries that joined the EU in May 2004
FSC	Financial Supervision Commission
GDP	Gross domestic product
GP	General practitioner
HALE	Health-adjusted life expectancy
HIV	Human Immunodeficiency virus
IMF	International Monetary Fund
INN	International non-proprietary name
MC	Medical centre
MCP	Medical care providers
MLSP	Ministry of Labour and Social Policy
MO	Municipal Office
MRF	Movement for Rights and Freedom
NATO	North Atlantic Treaty Organisation
NCDAP	National Centre for Drug Addiction Problems
NCIPD	National Centre for Infectious and Parasitic Diseases
NCPHP	National Centre for Public Health Protection
NCRRP	National Centre for Radiobiology and Radiation Protection
NHIF	National Health Insurance Fund
NMSS	National Movement Simeon Second Party

NSSI	National Social Security Institute
OTC	Over-the-counter
PDL	Positive drug list
PMC	Primary medical care
PPP	Purchasing power parity
RHIF	Regional Health Insurance Fund
RHM	Regional Health Map
RIPHPI	Regional Inspectorate of Public Health Protection and Inspection
SAC	Specialized ambulatory care
SJC	Supreme Judicial Council
SMC	Supreme Medical Council
UDB	Union of Dentists in Bulgaria
USAID	United States Agency for International Development
VHI	Voluntary health insurance
VHIC	Voluntary health insurance companies
WHO	World Health Organization
WTO	World Trade Organization

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Abstract

The Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of a health system and of policy initiatives in progress or under development. HiTs examine different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems; describe the institutional framework, process, content and implementation of health and health care policies; and highlight challenges and areas that require more in-depth analysis.

Health reforms in Bulgaria started at the beginning of 1990s and were aimed to make the Bulgarian health system more efficient and responsive to patients' needs, by improving quality of service and delivery of care.

The establishment of the National Health Insurance Fund and a basic benefits package defined the services covered by the public sector and earmarked the revenue collection for health care allowing for more sustainability of the health care budget. However, a financing system solely based on contributions failed to provide enough funding for the system. Approximately one million people opting out of universal coverage meant that there were fewer contributors than beneficiaries and this led to potential adverse effects on the balance of the National Health Insurance Fund.

Legalization of private practice had a positive impact on access to health services and the resulting competitiveness between health care providers acted as an incentive for higher-quality of service provision. However, commercialization of health care and a stronger focus on market relationships had an adverse impact on the social function of health care and gave rise to lack of motivation among providers.

A restructuring primary care and the introduction of GPs as gatekeepers to specialized care allowed for cost-containment but led to a discussion of whether such policies dilute the principles of free provision and access to health care for the population.

The restructuring of inpatient health care financing and provision was followed by the introduction of clinical pathways. This created better incentives for improving both quality and effectiveness of service provision. However, the actual cost of implementing clinical pathways for the hospital is higher than the price reimbursed by the National Health Insurance Fund, which causes financial instability in the inpatient sector.

Executive summary

Introductory overview

Bulgaria is situated in the eastern part of the Balkan Peninsula, in south-eastern Europe. The establishment of a new constitution in 1991 set in motion the process of introducing a democratic form of government.

Despite a large decrease in mortality since 1990, the country's mortality rate is still high compared to European Union Member States. Mortality rates from diseases of the circulatory system have increased, representing 66.1% of all deaths in 2005, followed by neoplasms and traumas. The infant mortality rate in Bulgaria was 11.6 per 1000 live births in 2004, which was more than twice as high as that in the 25 European Union Member States. Health reforms in the 1990s brought about wide-ranging changes in health care organization, financing and delivery, and a new type of relationship was established between users, providers and payers.

Organizational structure and management

Before the structural reforms of the 1990s the organizational arrangement of health care, decision-making and funding were centralized. The reforms led to the reorganization and decentralization of the main functions, whereby the Ministry of Health and its 28 decentralized regional health care centres develop and implement comprehensive national health policy and National Health Programmes. Following the transition to democracy, Bulgarian health care switched to a system of payroll contributions, establishing a semi-autonomous National Health Insurance Fund to raise revenue, allocate resources and govern

providers. The Fund's operational activities have been decentralized to the regional level and delegated to the 28 regional health insurance funds.

Privatization is another important feature of the Bulgarian health system. The Health Care Establishments Act outlined procedures for the privatization of both state and municipality medical establishments. Private practice was legalized in 1991 and has since expanded significantly, and in 1992 ownership of most health care facilities was devolved to locally elected municipalities.

Health care financing

Health care is financed from compulsory and voluntary health insurance (VHI) contributions, taxes, and formal and informal cost-sharing. One of the key principles of reform was the transition from general taxation budget financing to financing based on the health insurance principle. The compulsory health insurance system is represented by the National Health Insurance Fund and funded primarily from payroll-based contributions, with state and municipal budgets covering low-income and socially disadvantaged sections of the population.

The compulsory health insurance contribution is 6% of a monthly wage divided according to a 70:30 ratio between the employer and employee for the year 2006, and set to reach 50:50 in 2009. The compulsory health insurance guarantees a basic benefits package to the insured population, defined by the National Framework Contract.

Total health expenditure has been increasing since 1998 both in absolute terms and as a percentage of GDP. It accounted for 7.7% of GDP in 2004, which was higher than the 6.8% average for the 10 countries that joined the European Union on 1 May 2004. An increasing trend in health care spending reflects improvements in the country's economy as a result of restructuring, efforts to accede to the European Union and development of compulsory health insurance. However, there was a general decline in levels of public health expenditure, accompanied by a relative increase in private funding (45.5% of total health financing in 2003).

In 1998 the contractual system was introduced between the National Health Insurance Fund and health care providers, as well as between municipal health care facilities. Hospitals receive funding through case payments (clinical pathways), which were introduced in 2001 and are based on a single flat rate per diagnosis. Until 2005, hospitals were also paid per diem by the Ministry of Health, covering all services and expenses per patient per day. Additional revenue reaches hospitals through patient co-payments, which are compulsory. In the

public inpatient sector health personnel are mostly salaried. Reimbursement to general practitioners is based on per-capita monthly payments per insured person on the patient list. Specialized outpatient care and laboratories are reimbursed by means of a fixed fee for services provided to patients. Dental care is mostly paid out of pocket, based on fee-for-service, although a limited number of dental services are included in the basic benefits package.

Provision of services

Human resources are assigned to health facilities in accordance with the National Health Map, which specifies by region target numbers of health care professionals per institution. Physicians or centres contract with the National Health Insurance Fund in order to participate in statutory provision of services, and any providers that do not sign contracts can provide private services on a fee-for-service basis.

The health reform relies to a great extent on the creation of a new actor in outpatient care: the general practitioner. General practitioners act as gatekeepers to specialized and hospital care, thus reducing expenditure on costly health care. The reforms created new types of outpatient institutions that embrace single and group practices, medical and dental centres and independent medical diagnostic centres.

Specialized ambulatory care facilities are registered as individual and group practices for specialized medical care within separate medical subfields, health, diagnostic and consultative centres, and individual medical and diagnostic or technical laboratories.

Despite a reduction in the number of beds during the reforms, Bulgaria has a much higher ratio of hospital beds to population than many countries in the WHO European Region, and the average length of stay (8.2 days in 2004) is lower than in most countries in the WHO European Region. Hospital care in Bulgaria is provided by public and private health facilities divided into multi-disciplinary and specialized facilities.

Since 2001, emergency care services cover the whole of Bulgaria and each of the 28 administrative districts has a Regional Centre for Emergency Care. The Ministry of Health is responsible for the organization, planning and financing of all activities related to the provision of emergency care in Bulgaria. The Pharmaceuticals and Human Medicine Pharmacies Act (1995) created the basis for the restructuring and privatization of the production and distribution of pharmaceuticals and most pharmacies are now privatized.

Principal health care reforms

The structural health care reform took three key directions: restructuring the health financing system based on compulsory health insurance, reorganizing primary health care and rationalizing outpatient and inpatient facilities. The main points of health care reform include the adoption in 1998 of the Health Insurance Act as the legal basis for the introduction of both compulsory and voluntary health insurance, and the introduction of the National Framework Contract, which defines the basic benefits package and regulates payments to health care providers. Changes in ownership of health facilities and in the contractual basis for paying health facilities and providers opened up opportunities for creating a large, regulated public–private health care market. Restructuring the health financing system enhanced the competition between health care providers and affected the quality of services.

The reforms not only brought improvements in primary care, health promotion, quality of care, patient choice, and hospital restructuring and financing, but also highlighted that there is the political will and the capacity in the country to bring about further change in the future.

However, it is inevitable that the success achieved is hindered by certain difficulties. There is public dissatisfaction with the health system; exemption of some population groups from compulsory health insurance coverage; a shortage of public financial resources; insufficient managerial capacity and health infrastructure; a sizeable informal sector; limited competition combined with insufficient obligatory standards and regulations for good practice; and insufficient information available for effective decision-making.

1 Introduction

1.1 Overview of the health system

The sociopolitical changes that have taken place in Bulgaria since 1989 have had a big impact on the health system. The previous “Semashko” model was based on the principles of universal coverage and free access at the point of delivery. The system was centrally planned and run, financed from general government revenue and characterized by almost complete public ownership. It is also notable that there was an absence of a private sector (as the private system was abolished) and that all professionals in the health system had the status of salaried civil servants. The system was curative in orientation, reliant on inpatient care with hospitals dominating the delivery system. Informal payments by patients for health care services and medicines were common, although not officially sanctioned by the authorities. All this led to mismanagement in connection with health services delivery and therefore required radical reforms.

Major reforms began in 1989 and by the mid-1990s they had transformed the centralized, tax-based system into a decentralized and pluralistic compulsory health insurance system, with employee contributions and contractual relationships between the National Health Insurance Fund (NHIF) as a purchaser and health care providers. The NHIF acts as a single agency providing most of the funding. Through its 28 regional bodies (the regional health insurance funds), it finances the entire health care network for outpatient care, and since July 2000, it also finances the contracted hospitals.

Private insurers provide an alternative means of funding health care as well as those drugs and treatments that are restricted in the state health insurance package.

Health care facilities are organizationally autonomous structures. In accordance with the 1999 Health Care Establishments Act, outpatient care is provided by single and group practices, medical and dental centres and independent medical diagnostic centres. Physicians or centres contract with the NHIF in order to participate in statutory provision; any providers that do not sign contracts can provide private services on a fee-for-service basis.

Inpatient care is provided by general and specialized hospitals, dispensaries, nursing homes and hospices, and hospitals providing acute, chronic, long-term care and rehabilitation. Although the health care reforms of the 1990s saw a significant reduction in the number of beds, Bulgaria still has an extensive hospital network throughout the country that provides easy access to inpatient care. However, there is also an excessive and unnecessary use of beds.

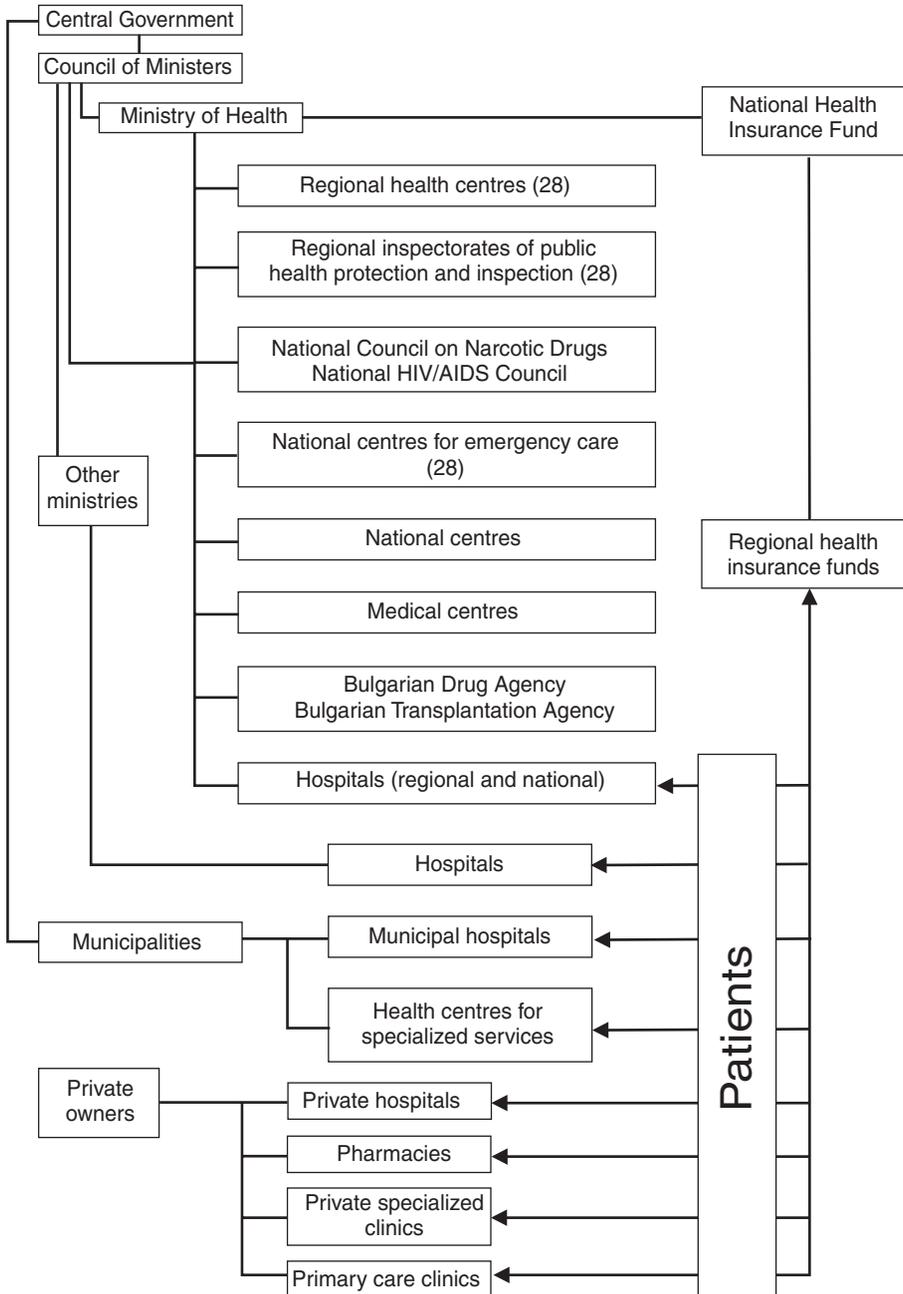
Public health services are organized by the Ministry of Health and its 28 regional health centres and are financed centrally. In 1999, the system of public health was restructured and took on additional functions related to public health protection and promotion run by 28 regional inspectorates of public health protection and inspection (RIPHPIs). The public health network also includes 28 national centres for emergency care, the National Centre for Radiobiology and Radiation Protection, the National Centre of Health Informatization and the National Centre of Public Health. Fig. 1.1 provides an overview of the Bulgarian health system.

The main sources of health system financing are compulsory health insurance, state and municipality budgets, voluntary health insurance (VHI), household expenditure allocated to the system as co-payments, fee for service or out-of-pocket expenses, and external resources allocated from donor organizations and national and international nongovernmental organizations (NGOs).

The Ministry of Health funds university hospitals, specialized health institutions at national and regional levels, the public health system, National Health Programmes, medical research and international cooperation in health care. Following decentralization in 1992, municipalities are now responsible for most health care provision and raise their own revenue as well as receiving additional resources from the central Government. Since the establishment of the health insurance system in 1998, the NHIF pays for all outpatient care and for about 20% of inpatient care costs on a contractual basis. Municipalities continue to fund the non-contracted hospitals within their territory, except for the regional hospitals, which are funded by the Ministry of Health.

At the time of writing, inpatient care is financed from three sources: government budgets, municipal budgets and health insurance. The NHIF pays only to contracted hospitals per case or clinical pathway consisting of a number of diagnoses, with fixed prices. Hospitals which have not contracted with the

Fig.1.1 Overview chart of the health system



NHIF continue to be paid by the municipalities or by the State. Hospitals also receive additional revenue from compulsory co-payments and fees for those services that are not covered by the basic benefits package of health insurance. Fee-for-service can be paid out-of-pocket as well as through VHI. Physicians working in the inpatient sector are salaried. Providers of outpatient care are contracted with the NHIF and are paid by fee-for-service.

Physicians in primary care are reimbursed per capita and reimbursement depends on the number of patients on the physician list. Historical differences in resource allocation are compensated in accordance with developed per-capita formulas.

1.2 Geography and sociodemography

The Republic of Bulgaria is situated in the eastern part of the Balkan Peninsula in south-eastern Europe, bordered by Romania to the north, the Black Sea to the east, Serbia and The former Yugoslav Republic of Macedonia to the west, and Greece and Turkey to the south. Enjoying a mild continental climate, the country consists mainly of mountainous terrain with lowlands in the north and south-east. The total area of Bulgaria is 110 944 km² (Fig. 1.2).

Table 1.1 Population/demographic indicators, 1995–2005

Indicators	1995	1997	1999	2001	2003	2005
Population (thousands)	8 400	8 312	8 208	7 910	7 823	7 740
Ages 0–14 (% of total)	17.97	17.02	16.15	15.28	14.44	13.80
Ages 15–64 (% of total)	66.98	67.29	67.68	68.22	68.86	69.40
Ages 65+ (% of total)	15.05	15.69	16.50	16.50	16.70	16.80
Population female (% of total)	51.05	51.17	51.29	51.40	51.48	51.60
Population density (people per km ²)	75.93	75.13	74.19	71.20	70.71	70.00
Birth rate, crude (per 1000 people)	8.60	7.70	8.90	8.60	8.60	9.00 ^a
Death rate, crude (per 1000 people)	13.60	14.60	13.60	14.20	14.30	14.20
Population growth (annual %)	-0.43	-0.53	-0.60	-1.88	-0.59	-0.30
Urban population (% of total)	67.80	68.24	68.68	69.12	69.56	70.00
Rural population (% of total)	32.20	31.76	31.32	30.88	30.44	30.00

Source: World Bank, World Development Indicators database, 2006 (4).

Note: ^a 2004 data.

Fig. 1.2 Map of Bulgaria

Source: World Fact Book, 2006.

Bulgaria is divided into 28 administrative regions, which are further subdivided into 262 municipalities. Sofia, the capital, is considered an administrative region.

In 2005 the population was 7.7 million, of whom 51.6% were women (2). In 2001 Bulgarians accounted for 83.9%, Turks 9.4%, Roma 4.7% and others 2% (3). Bulgaria's population is ageing. The share of the population below 15 years of age decreased and accounted for 13.8% of the total population in 2005, whereas the share of those over 65 increased to 16.8% of the total population (4). As in many central and eastern European countries, in Bulgaria the ageing of the population is more significant for rural areas, where 25% of the population in 2005 were aged over 65 and the average age for the rural population was 41.2 years old (2). Table 1.1 presents some demographic indicators.

Birth rates have been dropping steadily since 1990, and Bulgaria has one of the lowest crude birth rates in Europe. In addition to low birth and high mortality rates, the population is decreasing owing to migration. This includes migration

of the ethnic Turkish community as well as the fact that many young people are leaving the country to seek better opportunities for education and jobs abroad. These demographic processes signal a depopulation of the country.

Bulgaria is ranked as a moderately urbanized European country, with 70% of the population living in urban areas (2). The Bulgarian language comes from the Slavic group of languages and is written in the Cyrillic script.

1.3 Economic context

Bulgaria and Romania are the two new members of the European Union that joined in January 2007. Since the early 1990s, Bulgaria has made extensive efforts to meet the economic and political criteria and complete its preparation for European Union (EU) membership. However, more progress is needed, including in the area of public health.

Until the middle of the 1990s, Bulgaria was characterized by political instability, poor economic performance and a constantly critical situation (Table 1.2). The country lacked the infrastructure necessary for sustained growth and was dependent on imports of energy; it continued to accumulate substantial foreign debts and tried to overcome hyperinflation and the acceleration of privatization. There was a sharp fall in real gross domestic product (GDP) in 1996 and 1997 together with triple-digit inflation, associated with the currency crisis.

Since the beginning of the reforms, significant effort has been made to reverse the negative trends of earlier years. In 1997 Bulgaria restructured its foreign debts and introduced a “currency board” arrangement under which the Bulgarian lev (BGN) was fixed. This arrangement was largely instrumental in underpinning Bulgaria’s monetary stability and credibility, thus reducing price instability.

Structural changes in the economy, developments in privatization, and increased exports and imports contributed to a rise in GDP. Shifting from very low to negative growth rates throughout most of the 1990s, Bulgaria has registered a consecutive, strong economic growth since 2000, reaching 5.5% GDP growth by 2005 (4). Despite the remarkable acceleration in GDP growth, its absolute value is still far behind the index numbers of most of the countries which joined the EU in May 2004 (EU10). According to World Health Organization (WHO) estimates, in 2005 the Bulgarian GDP per capita was US\$ 635 at purchasing power parity (PPP), compared to US\$ PPP 1760 in Slovenia, US\$ PPP 1333 in Hungary, and US\$ PPP 751 in Latvia (4).

Table 1.2 Macroeconomic indicators

Indicators	1995	1997	1999	2001	2003	2005
GDP (current US\$, millions)	13 106	10 365	12 945	13 598	19 938	26 648
GDP (US\$ PPP, millions)	46 624	41 370	44 224	51 223	58 716	68 073
GDP per capita (US\$ PPP)	5 551	49 771	53 881	6 475	7 506	8 794
Annual GDP growth (%)	2.86	-5.60	2.30	4.10	4.50	5.50
Short-term debt outstanding (% external debt)	4.94	17.99	11.81	11.61	19.83	20.67 ^b
Value added in industry (% of GDP)	32.69	27.94	28.88	29.61	29.68	30.45
Value added in agriculture (% of GDP)	–	26.21	16.31	13.30	11.57	9.28
Value added in services (% of GDP)	–	45.85	54.81	56.99	58.74	60.28
External balance on goods and services (% of GDP)	-1.50	4.58	-5.77	-7.57	-9.49	-16.55
Official exchange rate (BGN per US\$, period average)	0.07	1.68	1.84	2.18	1.73	1.57
Inflation, GDP deflator (annual %)	62.85	948.53	3.72	6.68	2.24	3.88
Gini coefficient (Distribution of income) ^a	0.384	0.366	0.326	0.333	0.351	0.358*

Source: World Bank Development Indicators, 2006 (4); ^a UNICEF TransMONEE, 2006 (5).

Note: ^b 2004 data.

The external balance of goods and services has decreased from -1.50% of GDP in 1995 to -16.55% of GDP in 2005, indicating Bulgaria's dependence on foreign trade and imports (4). In recent years Bulgaria has imported mostly cosmetics, pharmaceuticals and articles of clothing, and exported mainly electricity, heavy-industry and oil-refined products. The main export countries include the OECD countries and EU Member States such as Germany, Italy, Greece, France, Belgium and Turkey (6).

Despite the positive changes and the recorded economic growth, Bulgaria remains far behind the EU Member States in terms of income per person, and poverty continues to be a problem, particularly by EU standards. According to data provided by NHIF specialists, in 2006 the average monthly wage was BGN 160 (€82). Although the benefits of reform have reached growing numbers of people, a significant part of the population still remains poor, with 13.4%

living below the relative poverty threshold (7). The latest World Bank Poverty Assessment also found that 7.9% of Bulgarians were living below the absolute poverty line of US\$ 2.15 per day, and 31.9% below US\$ 3.40 a day (8). Such poverty affects mostly rural residents, distinct demographic groups, poorly educated individuals, ethnic minorities and unemployed people.

Unemployment decreased dramatically from 17.9% in 2000 to 10.1% in 2005, according to government statistics. In 2005 the unemployment rate for females was higher than that for males (10.3% versus 9.8%) and higher in rural areas (13.7%) compared to urban areas (9.0%) (2). National Statistical Institute unemployment estimates are based on labour force surveys, which are based on the definitions of the International Labour Organization. Thus, workers who are not actively looking for employment are not included in the estimates. According to statistical surveys, Bulgaria has a significant informal labour sector that generates about 20% of GDP and includes more than a quarter of the economically active population (2). Mostly these are self-employed workers who are not registered in official statistics, do not pay taxes and are not covered by compulsory health insurance. However, decreasing unemployment rates in Bulgaria suggest that the formal labour market is improving.

1.4 Political context

Bulgaria is a parliamentary republic governed by a National Assembly, or Narodno Subranie, consisting of 240 deputies who are elected for four-year terms. Parliament selects and dismisses government ministers, including the Prime Minister, exercises control over the Government, and sanctions deployment of troops abroad. It is responsible for the enactment of laws, approval of the budget, scheduling of presidential elections, declaration of war, and ratification of international treaties and agreements.

The President of Bulgaria is elected for a five-year term with the right to one re-election. The President serves as the Head of State, commander-in-chief of the armed forces and head of the Consultative Council for National Security. Parliament can overturn the president's veto with a simple majority vote.

The Prime Minister is head of the Council of Ministers, which is the primary component of the executive branch. In addition to the Prime Minister and deputy prime ministers, the Council is composed of ministers who head the various agencies within the Government and usually come from the majority/ruling party or from a member party of the ruling coalition in Parliament. The Council is responsible for carrying out state policy, managing the state budget and maintaining law and order. There are about 250 parties in Bulgaria, the

main parties are: the Bulgarian Socialist party (BSP), the Simeon II National Movement (SNM), the Movement for Rights and Freedom (MRF) and the Democratic Forces Union party.

The Bulgarian judicial system consists of regional, district and appeal courts. The Supreme Judicial Council (SJC) is composed of 25 members serving five-year terms. Those who serve on the council are experienced legal professionals and are either appointed by the National Assembly, or are selected by the judicial system, or serve on the SJC as a result of their position in Government. The SJC manages the judiciary and is responsible for appointing judges. The Supreme Court of Administration and Supreme Court of Cassation are the highest courts of appeal and determine the application of all laws. The court that interprets the Constitution and constitutionality of laws and treaties is the Constitutional Court. Its 12 justices serve nine-year terms and are selected by the President, the National Assembly and the Supreme Courts.

Administratively, Bulgaria is divided into 28 regions and 262 municipalities. The Governors of the regions are appointed directly by the Government. Municipalities act as self-governing bodies. Mayors and members of municipal councils are elected at municipal elections. Since 1992, municipalities have been devolved substantial responsibilities for health care, education and social affairs.

In accordance with the monitoring report of the Commission of the European Communities of September 2006 (9), Bulgaria has made further progress to complete its preparations for EU membership. Some progress has been made in the reform of the justice system, economic stability, current account deficit and the fight against corruption.

1.5 Health status

The health status of the Bulgarian population generally worsened as the economy deteriorated. In 2004, life expectancy at birth levelled at 72.6 years for Bulgaria, which is two years below the EU10 average (74.5) and approximately 6 years below the EU15 average (79.4) (10). It dropped during the early 1990s and the decreasing trend continued in the transition years, but is generally speaking rising again at the time of writing (see Table 1.3). The increase in life expectancy rates is notable for both males and females. In 2004 it reached 69 years of life expectancy at birth for males and 76 years for females, compared to 67 years for males and 74 for females in 1997, with average life expectancy at birth of 70 years (both sexes) (10). National experts attribute the decline in total life

expectancy during the mid-1990s mostly to a decline in male life expectancy during that time.

The average health-adjusted life expectancy (HALE) for males was 63 years compared to 67 years for women in 2002. Relative to those at the age of 60, the estimated HALE for men was 11.5 years and 13.9 years for women. The estimated disability-free life expectancy (DFLE) was 62.5 years for men and 66.8 years for women in 2002 (10).

Despite a large decline in the mortality rate since 1990, it is still among the highest compared to the EU Member States. However, Bulgaria, as well as other EU countries, shows an overall trend of improvement for this indicator since the 1980s. The data on this indicator are available from national sources and from the WHO Regional Office for Europe. Mortality rates reflect health conditions affecting the population which are associated with unhealthy lifestyles, unbalanced nutritional patterns, increasing rates of smoking and alcohol consumption, risky sexual behaviour, psychosocial stress and low levels of physical activity (11).

Table 1.3 Mortality and health indicators, 1995–2004 (selected years)

Indicators	1995	1997	1999	2001	2003	2004
Total life expectancy at birth (years)	70.99	70.28	71.67	71.91	75.77	72.60
Female life expectancy at birth (years)	74.89	73.82	75.12	75.44	78.42	76.30
Male life expectancy at birth (years)	67.40	66.97	68.36	68.55	73.31	69.10
SDR, adult, female (per 1000 female adults)	9.16	10.29	9.13	8.74	8.55	8.20
Under 65 SDR, adult, female (per 1000 female adults under age 65)	2.58	2.81	2.51	2.46	2.32	2.30
SDR, adult, male (per 1000 male adults)	14.65	15.74	13.97	13.84	13.74	13.40
Under 65 SDR, adult, male (per 1000 male adults under age 65)	6.18	6.25	5.68	5.67	5.46	5.50
Infant deaths (per 1000 live births)	14.80	17.51	14.62	14.40	11.98	11.70
Probability of dying before age 5 (years per 1000 live births)	18.22	22.33	17.87	17.18	14.33	14.50

Source: WHO Regional Office for Europe, 2006 (10).

Note: SDR = Standardized death rate.

Table 1.4 Selected mortality, 2005 or latest available year (in parentheses)

Indicators	Deaths per 100 000 population		
	Total	Male	Female
Communicable diseases			
Infectious and parasitic diseases	8.4	11.4	5.5
Tuberculosis (2004)	2.8	4.7	1.2
AIDS/HIV (as recorded by routine mortality statistics system) ^a	0.0	0.0	0.0
Noncommunicable diseases			
Diseases of the circulatory system	968.1	1 004.7	933.7
Neoplasms	231.7	276.8	189.3
Mental disorders	1.6	2.2	1.0
Diseases of the nervous system and sense organs	10.7	12.4	9.1
Diseases of the respiratory system	57.7	74.3	42.1
Diseases of the digestive system	42.8	62.2	24.5
Diseases of the genitourinary system	15.4	18.2	12.8
Diseases of the skin and subcutaneous tissue	0.7	0.6	0.7
Diseases of the musculoskeletal system and connective tissue	1.1	0.8	1.4
External causes			
Accidents and poisonings	50.8	79.5	23.7
Suicide and self-inflicted injury (2004)	11.0	17.7	5.2
Selected alcohol-related causes (2004)	66.8	111.3	27.1
Selected smoking-related causes (2004)	407.2	534.9	303.5

Sources: National Statistical Institute, 2006 (2); ^a WHO Regional Office for Europe, 2006 (10).

Mortality rates from diseases of the circulatory system have increased and represent 66.1% of all deaths in Bulgaria in 2005. This was followed by neoplasms (15.8% of all deaths) and traumas (3.5% of all deaths) (2). Main causes of mortality for 2005 and 2006 are presented in Table 1.4 and Table 1.5.

Infant mortality rates are above the EU10 and the EU15 averages. Having reached its peak in 1997 (17.5 per 1000 live births), infant mortality decreased to 11.6 per 1000 live births in 2004, which was more than twice that of all the 25 EU Member States (4.7 deaths per 1000 live births in 2004) (2,10). There are also substantial differences between regions: the highest rates in 2004 were in Sliven region (27.5 deaths per 1000 live births), Montana region (23.2 deaths per 1000 live births), Yambol region (21.5 deaths per 1000 live births) and Lovetch region (17.0 deaths per 1000 live births), which are regions with high ethnic differences (2). Such high levels of infant mortality could be attributed to scarce technological infrastructure to treat abnormalities during the

Table 1.5 Mortality by disease per 100 000 population, 2004

Disease	No. of deaths
Cardiovascular diseases	1311.2
Neoplasms	209.3
Symptoms, signs and unclearly defined conditions	104.8
Diseases of the respiratory system	75.6
Traumas and poisoning	63.7
Diseases of the digestive system	43.8
Diseases of the endocrine glands, alimentation, metabolism and disorders of the immune system	26.5
Diseases of the urogenital system	14.4
Diseases of the nervous system and sense organs	12.6

Source: National Centre Health Informatics, 2005 (12).

perinatal period (4.0 deaths per 1000 live births), inborn anomalies (2.8 deaths per 1000 live births) and respiratory system diseases, including pneumonia and influenza (2.4 deaths per 1000 live births). At the time of writing respiratory system diseases are accounting for over 80% of all infant deaths, which is much higher than adult death rates from this diagnosis.

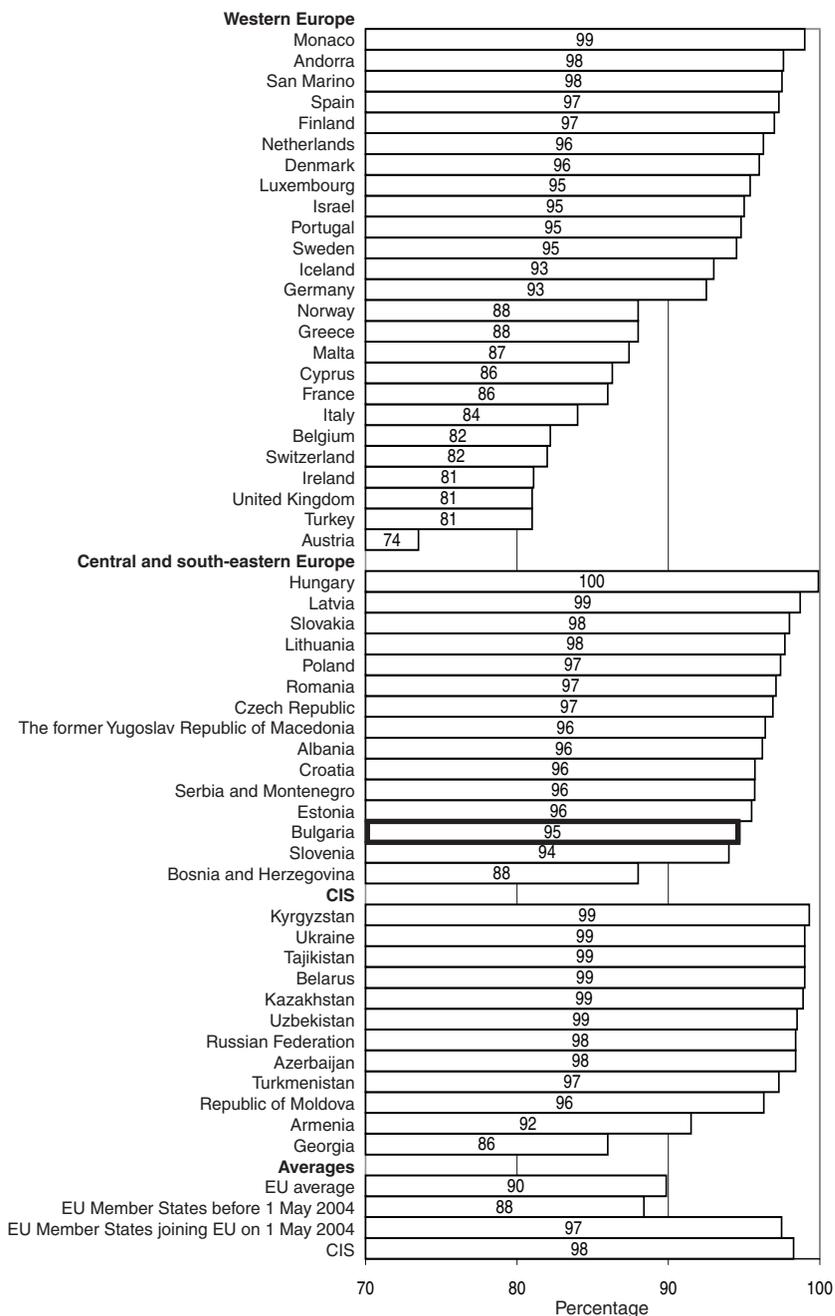
Morbidity rates from diseases of the circulatory system are also as high as the mortality rates caused by this diagnosis. The morbidity rate from respiratory disease in Bulgaria depicts a trend which is increasing in the long term and in 2005 accounted for 37.8% of all diseases (12).

The morbidity rate of HIV infection is increasing, amounting to 63 new cases reported in 2003 and 50 new cases in 2004, compared to 3–10 cases per year previously. There were 586 people living with HIV in Bulgaria by the end of 2004. The increasing number of new HIV-positive cases is accompanied by a rapid growth in sexually transmitted infection rates, drug abuse, prostitution and migration. The main mode of HIV transmission is sexual (91% of all cases). Of the HIV sexual transmission cases, 88% occur during heterosexual intercourse. The other modes of HIV transmissions are intravenous drug use (6% of all cases) and mother-to-child transmission (1% of all cases) (13).

Diseases of the nervous system and mental disorders account for the biggest share of disability in Bulgaria (25% of all disability cases). This is followed by diseases of the circulatory system (16% of all cases), musculoskeletal system and connective tissue (14% of disabilities), full or partial loss of eyesight (7% of disabilities), diabetes (5% of disabilities) and other forms of disability (6% of disabilities) (12).

Since the beginning of the 1980s, thanks to national efforts, immunization coverage against measles, diphtheria, poliomyelitis and pertussis has been above 95%, and this has enabled infection rates to be kept low for most vaccine-preventable diseases. About 94.7% of Bulgarian children were immunized against measles in 2004, compared to 88.6% in 2000 (10) when there was a sharp drop in vaccination rates. Coverage in 2004 was higher than the EU15 and the EU25 averages as presented in Fig. 1.3.

Fig. 1.3 Levels of immunization for measles in the WHO European Region, 2004



Source: WHO Regional Office for Europe, 2006 (10).

Notes: CIS: Commonwealth of Independent States; EU: European Union.

2 Organizational structure and management

2.1 Historical background

Developments before 1989

The first Health Insurance Act in Bulgaria was passed in 1918. In 1924 the Parliament approved the Public Insurance Act, along with compulsory insurance for all workers and public servants in public and private organizations against the risks of accident and sickness, to cover maternity leave, disability periods and retirement. In 1925, insurance against the risk of unemployment was introduced. The insured population had the right to a free choice of medical doctor. Health care was covered by the Public Insurance Fund, which collected contributions from employers, employees and the State.

Socioeconomic development influenced health insurance as well. In 1945 a new Health Insurance Act was approved by the Parliament that enlarged health insurance coverage. The Constitution of 1947 brought radical changes to the health system. In the period 1948–1949 private hospitals, clinics, dental unions and pharmacies were expropriated. After 1950 the health insurance principle in the financing of health care was replaced by the state health system, which was financed through general taxes to mirror the Soviet-style “Semashko” system. The system was centrally run, financed from general government revenue and characterized by almost complete public ownership.

The Bulgarian health system was developing mostly as a curative system, with an expanded network of health services, hospitals and maternity clinics, built in villages. Outpatient care was delivered by specialists in polyclinics integrated with hospitals. Primary health care was organized within a subregional

level and patients were allocated to polyclinic doctors according to their residence.

During the 1950s one of the health system priorities was to control infectious diseases such as tuberculosis, malaria, typhoid and parasitic diseases. Research institutes, hospitals and sanitary-epidemic (hygiene) stations were set up across the country. Extensive immunization and dental programmes were carried out and a network of pharmacies was developed.

During the 1960s and 1970s, the hospital system was strengthened, new hospitals built throughout the country and more doctors were trained after the establishment of five new medical universities. The 1973 People's Health Act outlined the general organization of the Bulgarian health system, which aimed to be free at the point of delivery, providing increased access to health care services. However, this inflexible and centrally controlled health system was unable to respond to the needs brought about by increasing chronic disease rates and it had low incentives for the provision of high-quality and efficient services. As the economy declined, the funds needed to sustain the health system were not available and demand exceeded the supply of services, although shortages were never officially acknowledged.

Developments since 1989

With the change of government, many elements of the Bulgarian health care model were discredited and the imminent collapse of the system became evident. Health system reforms were put on the government agenda, aiming to restructure health care financing, reorganize primary care and rationalize the network of inpatient and outpatient facilities.

The health insurance system and all relevant arrangements were introduced in 1998, as the Bulgarian Parliament adopted the Health Insurance Act. This was the legal basis for changing the health system and for the introduction of both compulsory and voluntary health insurance in the country. The Health Insurance Act established the NHIF and defined the relationship between NHIF, health care consumers and providers.

The Health Insurance Act also regulates the signing of the National Framework Contract between the NHIF and the professional associations of health care providers, namely doctors and dentists. The National Framework Contract outlines the structure and operational procedures of the compulsory health insurance system, methods of paying health care providers and benefits of the insured population. The National Framework Contract is valid for one year, until the signing of the next one.

Health insurance contributions began to be paid by employers and employees in 1999, but the amount of revenue collected was initially limited by the low tax base due to low incomes and high unemployment.

The establishment of the compulsory health insurance system was followed by the cycle of legislative Acts that formed the basis for health care reforms. The Pharmaceuticals and Human Medicine Pharmacies Act was adopted in 1995 (14), which outlined the terms and procedures for the licensing and control of the manufacturing, clinical trial testing, import, export, wholesale and retailing of drugs intended for use in human medicine in Bulgaria.

In 1998, the Parliament adopted the Professional Organizations Act (15), defining the legal status and the rights of physician and dentist organizations. The professional organizations are responsible for the licensing of physicians and dentists, managing continuing education, participating in the Supreme Medical Council (SMC) and representing health professionals during negotiations with the NHIF.

Reforms of the health system included the enactment of the 1999 Health Care Establishments Act (16), which regulates the organization of medical (inpatient and outpatient) and dental care. The existing public and private health care establishments were reorganized according to this Act. The Health Care Establishments Act also included procedures for privatization of both state and municipality medical establishments. With privatization, outpatient health care facilities, which are the property of the municipalities, may be sold or rented to general practitioners (GPs).

Since then, consumers (patients), providers (outpatient and hospital care health facilities) and agents (third-party payers – public and private health insurance organizations) have become key players in the health system, with relative autonomy in generating and using health resources, bringing the system towards a more market-oriented health system.

2.2 Organizational overview

The organizational structure of Bulgarian health care has been undergoing rapid transformation since the latter part of the 1990s. During the 1990s highly integrated, tax-based and hospital-oriented care was gradually replaced by a compulsory health insurance system, strengthening primary health care based on a model of general practice and rationalization of the services delivery network.

The current organizational structure of the Bulgarian health system is defined by the interaction of public and private players and a mixture of decentralized and centralized structures.

The main stakeholders in the Bulgarian health system are the Parliament, the Ministry of Health, the NHIF and the Higher Medical Council. A number of other ministries own, manage and finance their own health care facilities, including the Ministry of Defence, the Ministry of Internal Affairs and the Ministry of Transport. Private practice has expanded significantly, now including dental practices, pharmacies, physicians' surgeries, laboratories and outpatient clinics and polyclinics. All major stakeholders and their main interrelationships are shown in Fig. 1.1 in the Introduction. Their significance for the individual stakeholders and their functions are described in more detail here.

Parliament

The Parliament takes part in the development of national health policy. The Parliamentary Health Committee is the main body for the adoption of health-related legislation. The Parliament approves the budget of the NHIF together with the state budget, and, since recently, also approves the reports on the NHIF budget execution.

With the need for transparency and a higher level of citizen involvement in the decision-making process in mind, the Parliamentary Health Committee has organized round-table discussions, public hearings and conducted public opinion surveys on what are perceived to be the most sensitive issues, such as regulations on transplantation of organs, tissues and cells, control of narcotic substances and precursors, and pharmaceuticals.

Ministry of Health

The Ministry of Health develops and implements comprehensive national health policy, defines the goals and priorities of the health system, works out the National Health Programmes for improving the health status of the population and develops draft legislation concerning the health sector. It also plans and supervises the ongoing structural reforms in the health sector, including the harmonization of health legislation with European norms.

The Ministry of Health is also responsible for the emergency care network throughout the country, as well as the public health network consisting of several National Centres and the Hygiene and Epidemiological Inspectorates (a network of 28 hygiene and epidemiological inspectorates with headquarters in each of the country's 28 administrative centres), medical centres, the National Council

on Narcotic Drugs and the centres for HIV/AIDS counselling and testing in Sofia, Plovdiv, Burgas, Varna and Pleven. The Ministry registers private health care establishments in accordance with the 1999 Health Care Establishments Act and drafts guidelines, regulations, indicators and methodologies for health facilities accreditation.

In the pharmaceutical sector the Ministry also governs and administers the Executive Agency on Pharmaceuticals, which registers drugs and controls the country's pharmaceutical market. It carries out privatization procedures of pharmaceutical and health trading companies and oversees the central purchasing of life-supporting and life-saving pharmaceuticals.

The Ministry of Health consists of 28 decentralized administrative bodies (regional health care centres), which are responsible for carrying out national health care policy for each of the 28 regions in Bulgaria. The Ministry currently directly manages a number of national research centres, including the National Centre of Emergency Medical Care, the National Centre of Radiobiology and Radiation Protection, the Centre of Public Health, the Centre of Drug Addiction Problems, the Centre of Haematology and Transfusion, the Centre of Infectious and Parasitic Diseases, Physiotherapy and Rehabilitation, and the Centre of Health Informatics. In addition, the Ministry administers the National Executive Transplantation Agency.

Other ministries

The Ministry of Health is assisted by other institutions providing health-related supervisory functions, scientific work and information services to the population.

- The Ministry of Environment and Waters is responsible for preserving all aspects of the environment and for ensuring a healthy population.
- The Ministry of Education and Science is responsible for developing and disseminating health-related educational materials. It introduces modern health education programmes in schools to promote behavioural changes with respect to healthy lifestyles.
- The Ministry of Agricultural Forestry in compliance with the National Health Policy strategy guarantees the safety of foods for mass consumption according to EU standards.

Parallel health systems are run by the Ministry of Defence, Communications and Transportation, Internal Affairs and Justice. The ministries own and manage health care facilities. Employees and their families receive health care within the basic compulsory health insurance package covered by the NHIF. However, they can receive health care under the general health care network as well.

Municipalities

Since 1991, municipalities have been partially responsible for financing health care facilities which were more than 50% municipally owned. Since 1992, municipalities are given the ownership of most health care facilities, including diagnostic and consultative centres, municipal hospitals for acute care, specialized hospitals and outpatient clinics, all of them serving the needs of the respective municipality. In addition, municipalities are responsible for specialized paediatric and gynaecological hospitals as well as specialized regional dispensaries (for pulmonary diseases, oncology, dermato-venereology and psychiatry).

Supreme Medical Council

The SMC acts as a consultative body on health policy, hospital networks, national demographic problems, medical education and postgraduate medical training. The Council determines the main priorities of national health policy and medical aspects of demographic problems in the country.

The SMC is chaired by the Minister of Health and meets at least four times a year, providing opinions about draft laws and the legislative regulations of the Ministry of Health, and advising on financial and investment policy, implementation of medical technologies and human resources planning and qualifications. The SMC also suggests the criteria for quality assessment of diagnostic and preventive activities.

National Health Insurance Fund

In accordance with the 1998 Health Insurance Act (17), the NHIF was established in 1999 as an autonomous institution for compulsory health insurance. Its main functions include management of financial resources for medical care in accordance with the Health Insurance Act and the National Framework Contract (19) and to guarantee access to health care services for the insured population.

The NHIF consists of a central office, 28 regional health insurance funds (RHIFs) – one in each regional centre in the country – and 105 municipal offices. The structure, built in this way, is responsible for the 265 health regions coinciding with the municipalities in Bulgaria.

NHIF finances the entire health care network for outpatient care and those hospitals with which it has stipulated a contract. The NHIF Budget Act determines the amount of health insurance contribution. It develops and stipulates contracts with drug wholesalers; oversees drug claims for the purpose

of payment confirmation; develops methodologies and guidelines for the RHIFs' execution and monitoring of the National Framework Contract within their territories; develops a technology designed for complete information exchange between national and regional levels; and manages and controls the national health insurance information system.

The managing bodies are the Assembly of Representatives, the Board of Managers, the Audit Council and the Director. All of them are elected for a four-year period (17).

The Assembly of Representatives acts as a supreme managing body; adopts the regulations for NHIF operations; elects and releases the Board of Managers and the Audit Council; and determines their remuneration and scope of work. It also approves the annual NHIF budget and monitors its execution. The Assembly consists of representatives of the insured population, employers and the state employees. The Board of Managers consists of eight members and an elected chairperson. The Board elaborates and submits the procedures and regulations for the selection and election of the NHIF Director; appoints representatives in charge of design and amendment of the National Framework Contract; and monitors the NHIF budget execution. The Audit Council consists of five members who monitor and control the work of the Board of Managers, the NHIF Director and directors of the RHIFs.

The NHIF Director is elected by the Board of Managers. The Director organizes and manages the RHIFs' activities in compliance with the Health Insurance Act and regulates the structure and activities of the NHIF and the resolutions of the supreme managing bodies.

Twenty-eight RHIFs prepare their regional compulsory health insurance schemes and stipulate the contracts with the health care providers within their territory on behalf of the NHIF and in accordance with the National Framework Contract. The NHIF pays for the delivered health care services through its 28 RHIF offices in the country. They are administrative branches with no decision-making or selective contracting powers, responsible for negotiating individual agreements with health care providers on the grounds of the National Framework Contract, which defines the benefits package, the payment for health care activities and the services that are provided to the insured population.

Each RHIF is responsible for the analysis of the health status of the regional population and for updating the Regional Health Map (RHM). The RHM contains the information on health care infrastructure and health care investment for each region for hospital treatment, as well as for outpatient treatment. RHMs are based on available health establishments and their capacities for providing medical care. The RHM takes into account the specific geography, the existing infrastructure, the demographic stratification, the social characteristics and

the health status of the population, and must cover the country's needs for emergencies, primary and specialized outpatient care and hospital treatment.

Municipal offices are also established by the NHIF to be more accessible to the population and to provide support to the health care providers. The municipal offices check the primary health care provider's medical documents, register receipt booklets of chronically ill patients, create monthly reports on medical care providers and transfer documents received by the RHIF for processing.

Professional organizations

In accordance with the 1998 Act on Professional Organizations (15), the Bulgarian Medical Association and the Union of Dentists were re-established in Bulgaria in 1990.

Professional organizations defend the rights and interests of their members. They also participate in the development and endorsement of major legislative Acts in the sphere of health care, proposed and adopted by Parliament. Professional organizations are responsible for providing continuing education and training, for exercising professional control, for good medical practice and for ensuring that professionals adhere to ethical standards. Most health professionals belong to their respective professional organizations.

Both the Bulgarian Medical Association and the Union of Dentists currently negotiate with the NHIF the National Framework Contract, which outlines the conditions and procedures for the provision and payment of health care services for the insured population.

Professional organizations representing nurses, midwives, pharmacists and paramedical workers, as well as organizations representing the hospital, pharmaceutical and voluntary health insurance companies are also present in the country and are starting to become more involved in health policy-making.

Private sector

Private practice was legalized in 1991 and has expanded significantly, now including dental practices, pharmacies, physicians' surgeries, laboratories and outpatient clinics and polyclinics. The number of private inpatient establishments increased from 32 in 2003 to 40 private inpatient facilities in 2004. Private hospitals account for 16% of all hospitals and 2% of the total number of hospital beds (12). Most of them do not have contracts with the NHIF and the patients pay in full for the services provided. However, most patients cannot afford to pay out-of-pocket or through VHI for medical care. This is why private providers aim to contract with the NHIF and provide publicly funded services. Medical establishments that provide services covered by voluntary

health care can be either private or state-run (municipal) and can be any type of medical establishment, including individually owned practices.

Following the introduction of the 1999 Act on Health Care Establishments, physicians and dentists can own their single practices for primary and specialized medical and dental care. Group practices, medical centres, diagnostic-consultative centres, laboratories and hospices are established by the State or the municipalities as companies, cooperatives, shareholding or limited-liability companies, either independently or jointly with other specialists.

The Pharmaceuticals and Human Medicine Pharmacies Act (14) created the basis for restructuring and privatization of the production and distribution of pharmaceuticals and most pharmacies are thus privatized at the time of writing.

The private sector in Bulgaria is also represented by private health insurance companies providing VHI to the population. In 2006, 10 companies were providing a complementary package alongside the state basic health insurance package covered by the NHIF. VHI licensing is controlled by the Financial Supervision Commission (FSC), a subordinate commission of the Ministry of Finance, which controls insurance companies, pension companies and voluntary health insurance companies. Private insurance covers the cost of services outside the basic benefits package covered by the NHIF, as well as the cost of services covered by the NHIF. Voluntary health insurance funds are allowed to own the medical establishments themselves.

Apart from VHI and individual access to private health care, some employers sign contracts directly with private medical establishments for the benefit of their employees and families. These contracts provide regular prophylactic check-ups, early detection of diseases, and medical treatment when needed.

Nongovernmental organizations

There are a number of NGOs in the health sector, including organizations that existed during the communist period, such as those for the blind, the deaf and the disabled. In addition, a number of newer organizations have developed, representing people with multiple sclerosis, diabetes and cancer. There are other organizations dealing with patients' rights but they do not have a sizeable influence on health care policy.

Medical universities

The medical universities, consisting of the Medical Universities of Sofia, Varna and Plovdiv and the Medical Schools in Pleven and Stara Zagora, are largely

autonomous institutions, coordinated jointly by the Ministry of Health and the Ministry of Education and Science. Since the beginning of 1999, university hospitals have been financed and administered by the Ministry of Health and the teaching activities in these hospitals have been funded by the Ministry of Education and Science.

2.3 Decentralization and centralization

The process of decentralization could be considered as the transfer of state functions to local political and administrative levels. It originated outside the health sector and was motivated by political rationale. Nevertheless, the health sector was affected in many ways, such as by changes in the ownership of providers and raises in transfer revenue rights from central to local levels. However, in Bulgaria, as in some other countries of central and eastern Europe, the resulting institutional restructuring created more problems than it solved. The main rationale for decentralization in the health sector is to bring health services closer to local needs and to improve accountability, although it also fragmented the revenue pool and exacerbated geographical inequity.

Before the structural reforms of the 1990s the organizational arrangements of health care in Bulgaria were centralized. Decision-making was centralized and funding was transferred directly from the Ministry of Finance to the Ministry of Health, which was in charge of health financing, resource allocation, governance of providers and stewardship of the sector. Following the transition, Bulgarian health care switched to funding through compulsory health insurance contributions and established the semi-autonomous NHIF to raise revenue and allocate resources to providers. Its operational activities have been decentralized to regional level and delegated to the 28 RHIFs. The Ministry of Health devolved much administration to the 28 regional health centres, allowing a flatter management structure in each of the country's 28 regions.

Privatization is another important feature of Bulgaria's health system. The Health Care Establishments Act outlined procedures for privatization of both state and municipality medical facilities. Starting from 1992 ownership of most health care facilities was devolved to locally elected municipalities. The newly instituted therapeutic establishments for outpatient health care are registered under the Trade Law as trade companies. Their capital is owned in part by the State and the rights are exercised by the Minister of Health, and in part by the local municipality, and the rights are exercised by the respective municipal council. Regional hospitals in the regional centres have been transformed into medical establishments as shareholder companies with mixed ownership, whereby 51% belongs to the Ministry of Health and 49% to the municipalities

(data of 2003) (18). Other public health care facilities have been transformed into medical establishments or dispensaries as limited commercial partnerships, owned by the municipalities. Public health care facilities for outpatient care have been transformed into state or municipality medical establishments.

The Pharmaceuticals and Human Medicine Pharmacies Act of 1995 created the basis for restructuring and privatization of the production and distribution of pharmaceuticals and most pharmacies are now privatized.

2.4 Patient empowerment

In Bulgaria patients' rights are defined by the 1998 Health Insurance Act (17), the 1999 Health Care Establishment Act (16), the National Framework Contract (19) and the 2004 Health Act (20). These normative documents regulate the rights of citizens within the general health care process, their autonomy and the right to choose their physicians and health institution.

2.4.1 Patient rights

Until 2004 patient rights were defined in the National Framework Contract, which outlined the aspects of health care access and equity and the right of patients to make informed decisions. Further developments of patient rights were made with the introduction of the 2004 Health Act, which came into force in January 2005.

Article 81 of the Health Act (20) includes information on respect for patient rights. In section II part 3 of the Act, the rights and responsibilities of patients regarding every contact with the health system are defined. Article 84 describes the definition and eligibility for becoming a patient and the rules regulating patient registration. It is noteworthy that a patient may be registered only upon his/her own decision.

Articles 85 and 86 outline the right to health care, regardless of race, gender, age, ethnicity, religion, education, cultural beliefs, political belonging, sexual orientation and social status. The articles also include the right to high quality health care access, the right to have more than one physician's opinion regarding diagnosis and treatment, the right of patient privacy concerning the health status; the right to receive sick pay and the right to have clarifications from the health professionals on patients rights, responsibilities, health status and possible treatment options.

Article 87 defines the rights of patients admitted to hospital. The rights and procedures for obtaining informed consent are described in Articles 88 and 89

of the Health Act and Articles 90 and 91 stipulate the rules for discontinuing treatment. The procedure for complaints regarding patient rights violation is described in Article 93.

Chapter 5 of the Health Act lists all aspects of rights for mental health patients. The legal procedures for compulsory hospitalization and treatment of such patients are described in Articles 154 and 155, along with the requirements for appeal against any court decisions.

The Act also considers sanctions such as imposing fines or revoking licences for a certain period for medical personnel or health care providers violating patient rights.

The Health Act also determines the rights and the protection of the patients involved in clinical trials, which are also regulated by the Pharmaceuticals and Human Medicine Pharmacies Act. The Central Ethics Committee is another body responsible for patient safety and rights during clinical trials.

2.4.2 Patient choice

The 1998 Health Insurance Act and the National Framework Contract outline patient rights to choose a doctor and/or health care facility. Every Bulgarian citizen has the right to choose a GP without administrative and/or territorial constraints. Since 2005 some patient groups such as mothers are free to choose a paediatrician for their children and a gynaecologist, without GP referral. Also, the amendments to the Health Insurance Act allow for free choice and access to health care without consideration of the place of residence. Patients are also entitled to free choice of hospital, but are assigned to certain specialists there.

However, in an attempt to regulate specialized outpatient medical care the NHIF introduced a monthly quota on the number of specialist referrals provided for patients by GPs. Moreover, co-payments were introduced that restricted access to health care of some vulnerable patient groups such as pensioners or low-income individuals. Patients without GP referral should pay out-of-pocket for specialized health care access. Thus, the objective to increase health care efficiency clashes with other health care goals, in Bulgaria as in many other countries, such as access to health services and equity in their provision.

2.4.3 Information for patients

Patient information and the different ways and methods of disseminating such information without infringing individual rights and freedoms have been expanded upon since 1999. The additional training of medical experts in public

health, ethics and deontology departments has gained special significance, as considerable progress has been made through the transition from a “paternalistic” to an “autonomous” behaviour model for medical specialists; the autonomous model being based on informed consent and the presentation of thorough and comprehensive information to the patient, allowing him/her to make personal and informed decisions regarding their health. Information for patients and the requirements for informed consent are regulated in the 2004 Health Act. The 2004 Act on the Protection of Personal Data further regulates personal data protection and disclosure.

According to Article 27 of the 2004 Health Act, health information is defined as: “personal data related to health status, physical and psychological development of persons, as well as any other information contained in medical prescriptions, recipes, records, certificates and other medical documentation” (20).

Health information in health facilities is gathered, processed, used and stored in accordance with the ordinances of the Minister of Health adopted in consultation with the National Statistical Institute (20).

Article 86 of the 2004 Health Act defines the right, type, volume and method of providing information to the patient, envisaging the possibility of a second medical opinion. Important in this Article is the right of the patient to receive information on: more than one medical statement about the diagnosis, treatment and prognosis of his/her disease; protection of any data referring to his/her health status; an easily understandable explanation of one’s rights and obligations; and clear and accessible information on one’s health status and potential treatment methods (20).

Paragraph 2 of the same Article recognizes the right to receive not only information regarding treatment and health status but also information about cost of services, treatment and medicine, along with other health-related information during outpatient and inpatient care (20).

Article 88 of the 2004 Health Act outlines the information a medical care provider must disclose to a patient in order to meet the requirements for receiving a patient’s informed consent, or, in certain cases (under age, juvenile or judicially incapable persons), the informed consent of the patient’s representatives. According to the Article, the doctor (dentist) is required to provide timely and clear information to the patient on the following:

- the diagnosis and the character of the disease;
- description of the purpose and nature of the therapy, the reasonable alternatives, the expected results and the prognosis;

- the potential risks, connected with the proposed diagnostic–healing methods, including side-effects and unwanted medical reactions, pain or other discomforts; and
- the probability of favourable influence, the health risk of applying other methods of treatment or of refusal of treatment (20).

The right to information and freedom of decision regarding one's reproductive health is defined in the chapter on reproductive health (Article 126), which stipulates the methods of protecting and collecting personal data in a way that would prevent the distribution and identification of donor and recipient information. According to Article 132 of the 2004 Health Act, medical establishments implementing assisted reproductive activities shall keep an official register, including data on donors and recipients; fertile ova and their donors; the results of implemented assisted reproduction; and medical data about the health status of the recipient and the child. The same standards are also laid down in the Law on Transplantation of Organs, Tissues and Cells.

The NHIF as a defender of patient rights ensures patient knowledge with updated and correct information on patient rights, health care providers with signed contracts with the NHIF and the types and volumes of health care services that are provided.

In order to improve access for people, RHIFs and municipal offices have reception rooms where citizens can receive up-to-date information and lodge complaints. The NHIF also has an online web site and hotline consultation network with 10 telephone lines where patients, contractual partners and institutions can receive answers to their questions. The rights and obligations of health-insured citizens are also explained through the media and printed publications of the institution.

Similar activities are conducted at the Ministry of Health, which is responsible for the accreditation of medical establishments and for collecting patient complaints about the quality of health care services.

2.4.4 Complaint procedures

Complaints and appeals are ensured by two main pieces of legislation: the Law on Public Requests, Signals, Complaints and Appeals and the Health Act. According to the 2004 Health Act, patients (guardians) have the right to submit appeals to the regional health centres in the event of any disputes or infringements of patient rights in relation to medical care received. Regional centres for health are required to make an inquiry into and report any complaint/appeal within a seven-day time frame. If an offence has been committed, the regional health centre inspector is required to compile an administrative offence statement,

which is followed up by a penal decree issued by the director of the regional health centre. The penal decree is then sent to notify professional organizations and any associated RHIFs regarding the health professional in question. Patients are notified of any decisions and/or activities within three days following the conclusion of an inquiry by a regional health centre inspector (20).

Health professionals may be also be held subject to any penalties incurred under the Professional Organizations Act (15), the Health Insurance Act (17) or the Health Act (20). For example, the 2004 Health Act imposes sanctions for any unwarranted breaches of patient information or of the order of its concession. This includes fines ranging from 300 to 1000 BGN and possible deprivation of the right to exercise the medical profession for a period of six months to one year for failure to provide information to patients about their medical condition that would enable them to make an informed decision about their care. The fine increases to between 500 and 1500 BGN upon a second breach. Any official who concedes health information against the law, if not subject to graver penalty, can be levied a fine ranging from 500 to 1500 BGN and 2000 to 6000 BGN upon a second breach (20).

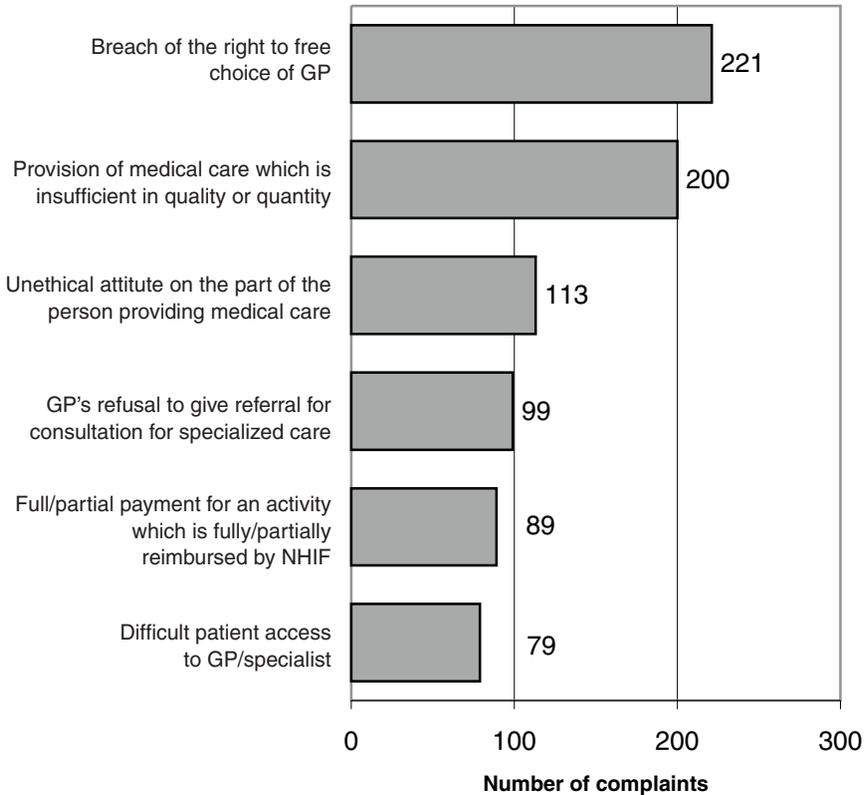
Patients (guardians) can also submit a complaint to the management of the relevant medical establishment or to the relevant RHIF office about breaches related to health insurance or the adequate provision of medical services in accordance with the order envisaged by the National Framework Contract.

According to NHIF statistics, in 2004, the 28 RHIF offices received a total of 1373 complaints from insured physical persons and 88 complaints from contractual partners. As a result, a total of 759 medical and 282 financial checks were done, whereby 5% of complaints were redirected to other competent institutions and 12% of complaints were followed up in the form of an inspection of documentation. 53% of complaints made by physical persons and 34% of complaints made by contractors were followed up in the form of medical checks and 19% of the complaints made by physical persons and 26% of those made by contractors were followed up in the form of financial audits (21).

As a result, 363 of the complaints made by physical persons (26% of total complaints) and 12 of those made by contractors (40% of total complaints) were found to be lawful and justified. The most common causes of complaint for both physical persons and contractors as reported to RHIFs in 2004 are listed in Fig. 2.1.

The detailed analysis of the control activity performed in 2004 warrants the conclusion that efforts in making checks and inspections need to be directed towards the following problematic areas: tracing a patient's pathway during outpatient care following dehospitalization, especially in the case of patients with chronic diseases or patients who are reported as needing to be continually

Fig. 2.1a Most common patient complaints, 2004–2005

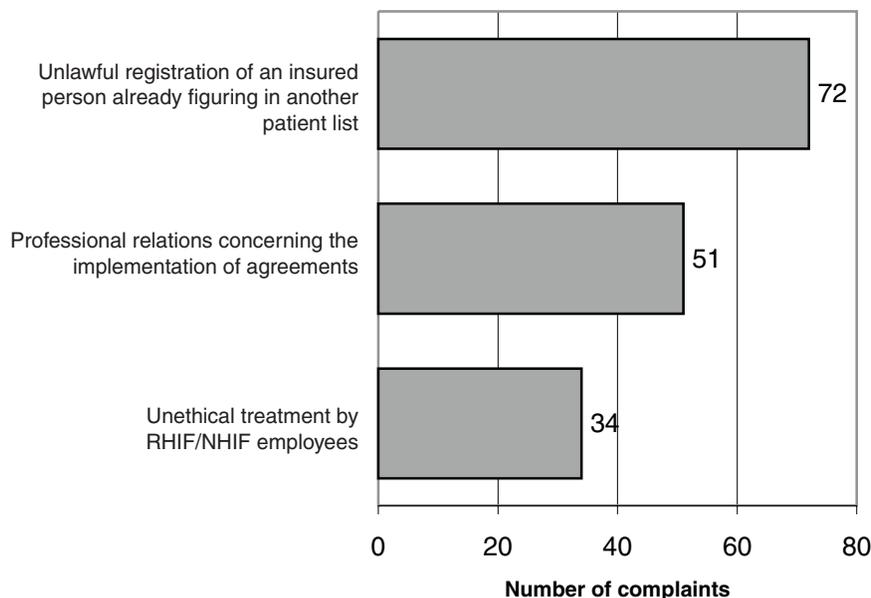


Source: National Health Insurance Fund, Annual Activity report for 2004, 2005 (21).

Notes: RHIF: Regional Health Insurance Fund; NHIF: National Health Insurance Fund; GP: general practitioner.

monitored; conducting systematic topical inspections of GPs and specialized individual medical practices; specialists' reporting of insured physical persons for continual monitoring; and control over the application of regulatory standards in view of the rational and correct use of volumes, especially in the case of continually monitored patients (21).

The 1998 Health Insurance Act, the 2004 Health Act and the Civil Code also provide additional possibilities for citizens to settle complaints using the legal system. In the last five years several lawsuits have been brought by citizens against medical doctors for errors in the treatment of patients or failure to provide the right volume or quality of medical care.

Fig. 2.1b Most common patient complaints for contractors, 2004–2005

Source: National Health Insurance Fund, Annual Activity report for 2004, 2005 (21).

Notes: RHIF: Regional Health Insurance Fund; NHIF: National Health Insurance Fund; GP: general practitioner.

2.4.5 Patient safety and compensation

There is no properly functioning national strategy for the enhancement of patient safety and compensation against medical malpractice. Associations that advocate and report on patient security, protection and compensation with regard to health are not centralized and only provide disaggregated services. Some of the patient safety issues associated with medical malpractice, patient awareness and education are under the auspices of the respective hospital committees. Some of the gaps in patient protection are covered by NGOs, which run several projects in the field. Various Ministry of Health projects and strategies also indirectly include relevant components such as accreditation of health care facilities or developing medical guidelines for diseases.

There is no system for the reporting and publishing of medical errors. This impacts on the development of medicine and practice and undermines patient trust in the system and their rights. One of the requirements of the Law on

Professional Organizations of Physicians and Dentists is the establishment of good medical practice rules, as well as the monitoring, reporting and control of their observation. Unfortunately, this legal requirement has not been implemented and there is no system that reports the violation of such rules, or that takes the necessary measures to improve the quality of medical services.

With regard to adverse drug reactions, the Pharmaceuticals and Human Medicine Pharmacies Act includes the arrangement for the monitoring, reporting and control of any adverse drug reactions by the Bulgarian Drug Agency (BDA). In recent years this field has been considerably developed to meet EU requirements and the current Bulgarian legislation fully complies with EU norms.

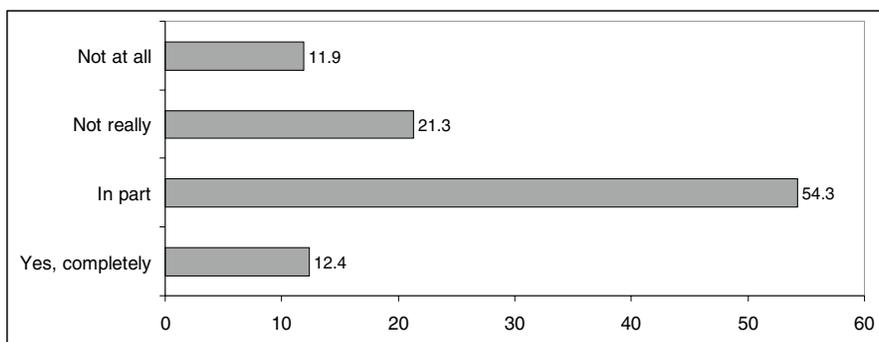
2.4.6 Patient participation and involvement

As mentioned previously, patient participation and involvement have been improving since the start of the health system reforms in Bulgaria. Patients legally now have increased rights, information and choice of health care provider and institution. However, at the time of writing patients are still unable to participate actively in the decision-making process regarding quality of health care services and allocation of funds. More work on these measures is laid out in the Health Strategy 2007–2010, which envisions patients taking on a greater role in the development of health care policy.

Progress has been made with reference to the awareness of the population of their rights as patients, the terms of payments for medical services and patient choice of services and providers. According to a 2003 poll, 67% of the Bulgarians surveyed were “sufficiently” or “somewhat” informed about their rights compared to 48% in 2001 (22). This poll involved 1018 adult Bulgarians in standard face-to-face interviews and was conducted in April 2003. Some results are presented in Fig. 2.2.

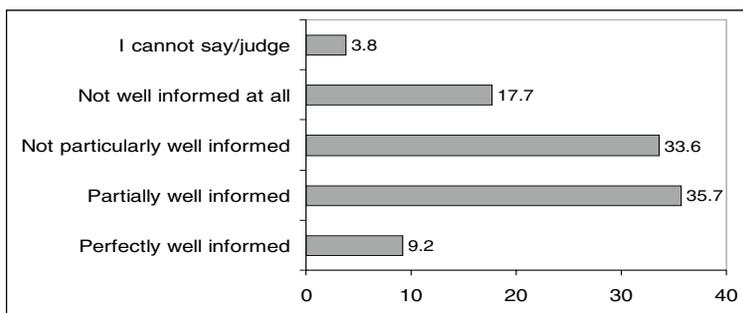
However, Fig.2.3 shows that there is also still a low level of patient awareness on the details of health system reform. 51% of adult Bulgarians surveyed consider themselves badly informed, while only 9% consider themselves to be perfectly well informed. Public awareness has increased by 7% since 2001, when only 2% of the population surveyed considered themselves perfectly well informed (22).

Fig. 2.2 Results of patient poll establishing awareness of patient rights



Source: Georgieva et al., 2003 (23).

Fig. 2.3 Results of patient poll establishing awareness of the health system reform process



Source: Georgieva et al., 2003 (23).

3 Financing

Bulgaria currently has a mixed system of health care financing. Health care is financed from compulsory and VHI contributions, taxes, and formal and informal cost-sharing.

Total health expenditure has been increasing since 1998 both in absolute terms and as a percentage of GDP. In 2003, out-of-pocket payments accounted for the largest share in the structure of total health expenditure (44.8%), followed by compulsory health insurance expenditure (28.1%), government budget expenditure (taxation) (26.4%), external sources of finance (1.0%) and VHI expenditure (0.7%) (24).

State taxes and compulsory health insurance contributions are collected by the National Revenue Agency, while local taxes and fees are collected by the municipalities. State taxes are pooled together in the central budget. Compulsory health insurance contributions are pooled by the NHIF for the purchasing of services.

Before establishing the compulsory health insurance system, the health system was financed mainly by general taxation through two main sources: the state budget and municipal budgets. Radical restructuring of the health system led to establishing compulsory health insurance and all relevant arrangements in 1998, as the Bulgarian Parliament adopted the Health Insurance Act. The Act established the NHIF and defined the relationship between NHIF, health care users and providers (17). VHI is implemented by joint-stock companies registered under the Commercial Law and licensed under the terms and procedures of the Health Insurance Act (17).

Following the enactment of health insurance legislation, health insurance contributions began to be paid by employers and employees in 1999. The health insurance contribution was set at 6% of income, and employer and employee initially shared the contribution at an 80:20 ratio (17). According to

the Amendments to the Health Insurance Act those proportions were changing almost annually and in accordance with the amendments of 3 October 2006, by 2009 the proportion of contributions is planned to be set at 50:50 (17). Contributions for the unemployed and poor, pensioners, students, soldiers, civil servants and other vulnerable categories are covered by central and local budgets. Currently about 92% of the Bulgarian population is covered by compulsory health insurance (21). Ethnic minorities such as Roma, and the permanently unemployed are excluded from the system.

The first National Framework Contract was adopted to regulate the health insurance system. Through the National Framework Contract the NHIF finances the entire health care network for outpatient care, and since July 2000 about 20% of inpatient care facilities on a contractual basis (19). Fig. 3.1 gives an overview of the financial flows in Bulgarian health care.

The Ministry of Health funds university hospitals, specialized health institutions at national and regional levels, the public health system, National Health Programmes, medical research and international cooperation in health care. Municipalities raise their own revenue for health care and receive additional resources from the central Government. Municipalities continue to fund the non-contracted hospitals within their territory, except for the regional hospitals, which are funded by the Ministry of Health. It is expected that the health insurance share of hospital financing will increase, gradually replacing the share funded by state and municipal budgets.

3.1 Health expenditure

Bulgaria's health expenditure as a percentage of GDP has been among the lowest in central and eastern Europe during the transition period, and is at present well below the EU average. In accordance with WHO estimates in 2004 total health expenditure in Bulgaria accounted for 7.7% of GDP in 2004 (10) (Table 3.1). As Fig. 3.2 shows, in 2004 it was below the 9.3% EU15 average, but higher than the 6.8% EU10 average. However, in 1999–2004, health expenditure increased from 6.0% of GDP to 7.7% (Fig. 3.3). There was also a notable increase in spending on health in Bulgaria in absolute values. In 2004 Bulgaria spent twice as much in international dollars per inhabitant (US\$ PPP 638) compared to 2000 (US\$ PPP 342) (Fig. 3.4). This is still far below the EU average but exceeds the per-capita health spending in Romania, the other country joining the EU in 2007.

The increasing trend in health care spending reflects the improvements in the country economy due to restructuring, increasing wages, reducing

Fig. 3.1 Financial flowchart

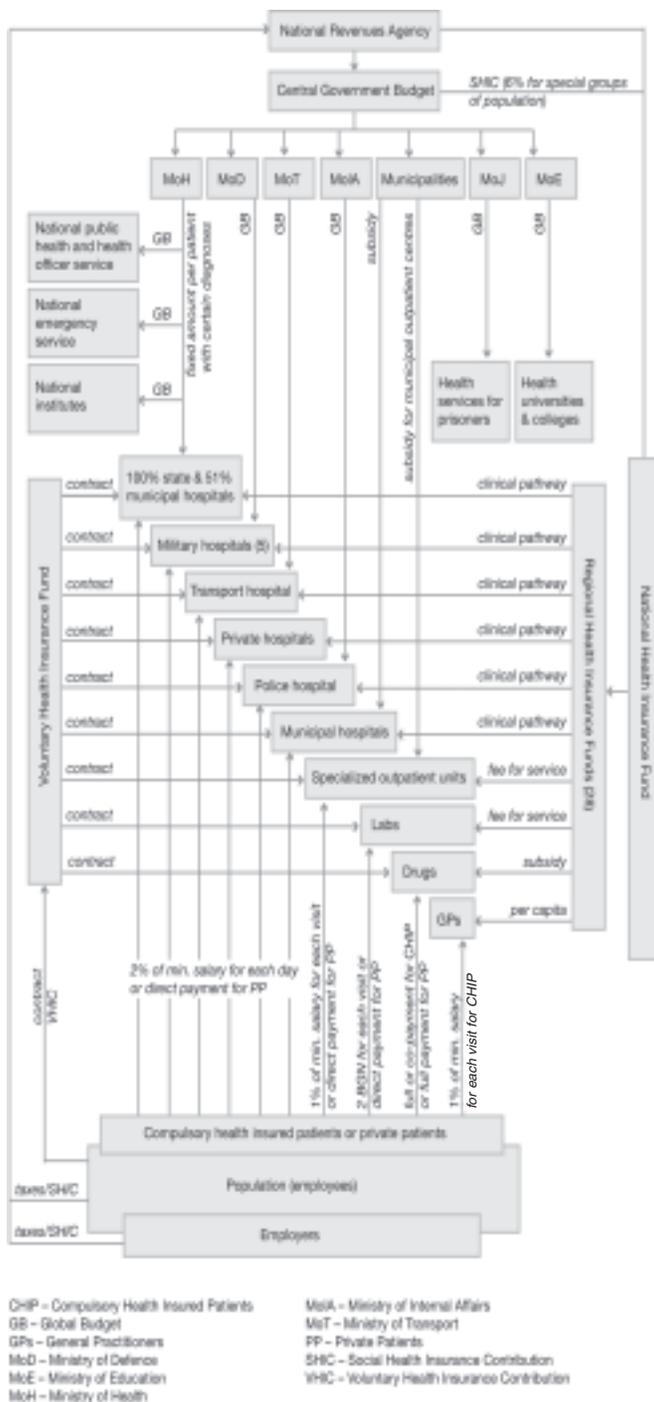


Table 3.1 Trends in health care expenditure, 1998–2004

Indicator/Year	1998	1999	2000	2001	2002	2003	2004
Total health expenditure per capita, US\$	278	342	381	476	561	573	635
Total health expenditure, % of GDP	5.1	6.0	6.2	7.2	7.9	7.5	7.7
Public expenditure on health as % of GDP	3.5	3.9	3.7	4.0	4.5	4.8	4.3
Public expenditure on health as % of total expenditure on health	67.9	65.4	59.2	65.1	56.6	54.5	55.8
Private expenditure on health as % of total expenditure on health	32.1	34.6	40.8	34.9	43.4	45.5	44.2
Annual real growth rate, GDP (%)		2.3	5.4	4.1	4.9	4.3	5.5

Source: World Health Organization, World Health Report, 2006 (24); World Bank, World Development Indicators, 2006 (4).

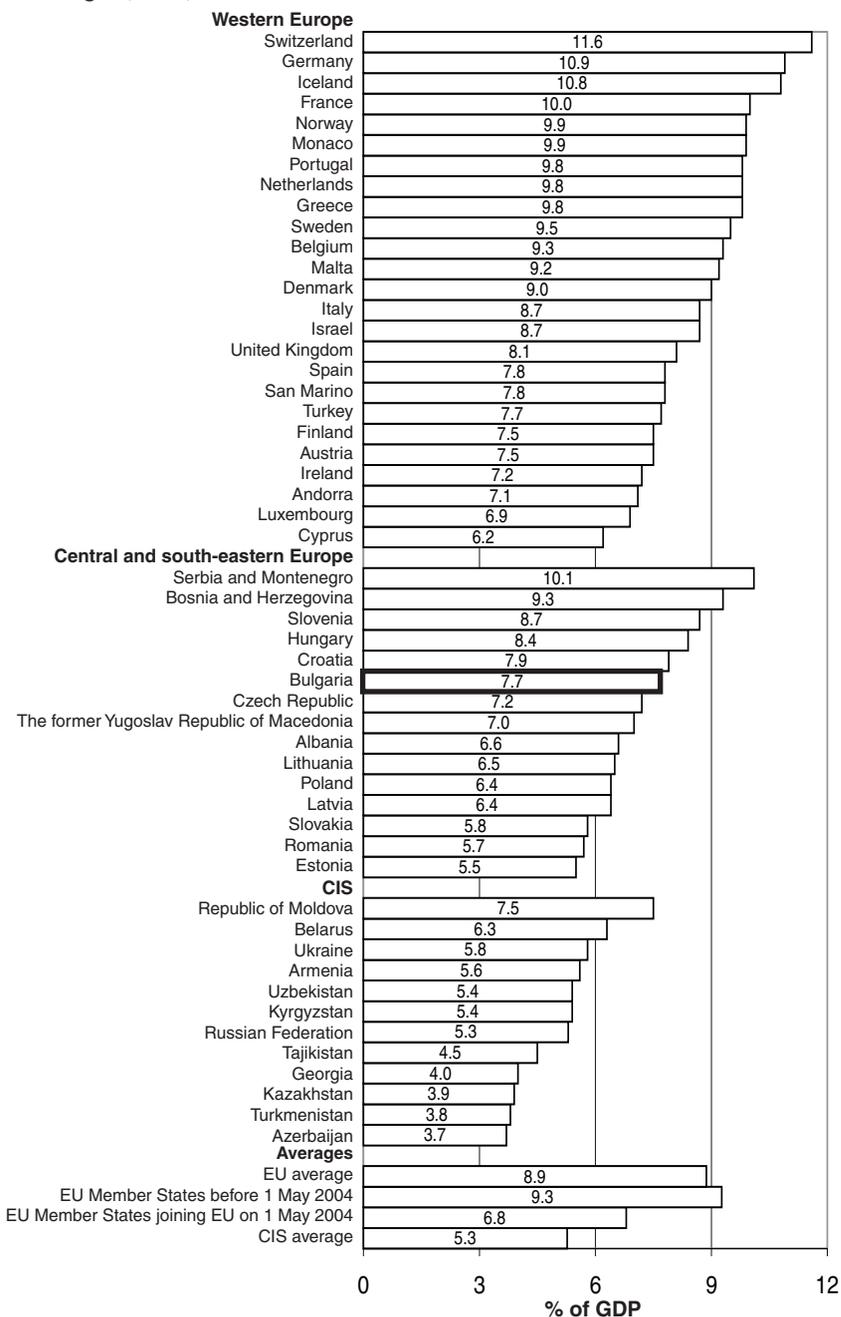
unemployment and efforts to obtain EU membership. It also could be linked to the introduction and better development of compulsory health insurance, which brought resources to the health system through taxation and legalization of private practice, allowing for additional sources of financing.

Public health expenditure

In Bulgaria the public share of total health expenditure, including governmental and compulsory health insurance sources, has decreased slightly since the mid-1990s, being much below the EU15 and EU10 averages (Fig. 3.5). This trend reflects a relative increase in private sources in Bulgaria. In the context of the overall economy, indicated as a share of GDP, in 2004 in Bulgaria the public share of health expenditure (4.3%) was slightly less than the EU15 average (6.7%) and below the EU10 average, but higher than that in Romania (3.4%) (Fig. 3.6).

Municipalities were responsible for most health care provision and financing from 1992. In 2001 funding of outpatient health care (primary and specialized) and dental care was shifted to compulsory health insurance, thus making compulsory health insurance and state budget the main health financing sources (Table 3.2). Another sharp decrease in municipal spending was registered in 2004, which was a result of the Ministry of Health introducing a new financing scheme for municipal and state health institutions (for more information see Section 3.6 Payment mechanisms).

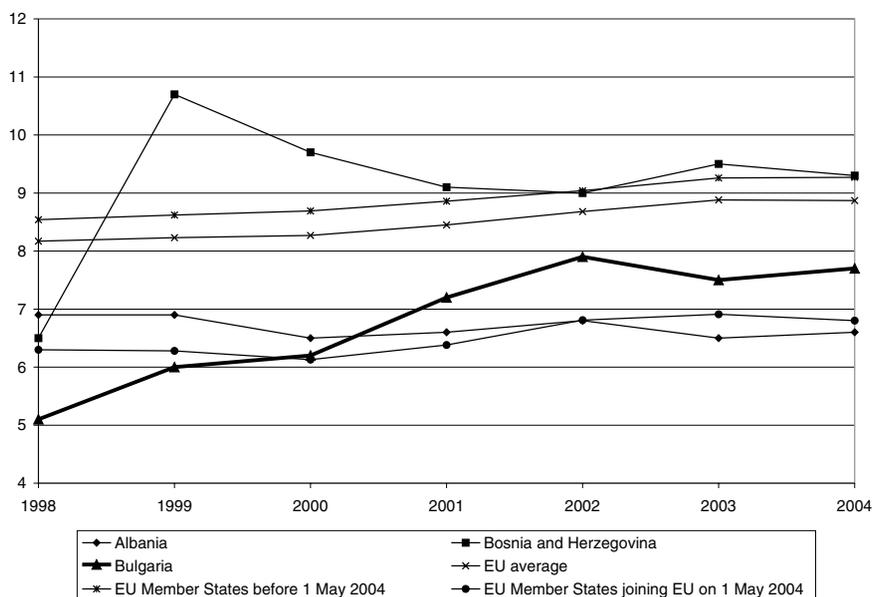
Fig. 3.2 Total expenditure on health as a percentage of GDP in the WHO European Region, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2006 (10).

Notes: CIS: Commonwealth of Independent States; EU: European Union.

Fig 3.3 Total expenditure on health as a percentage of GDP in Bulgaria, selected countries and averages, 1998–2004, WHO estimates



Source: WHO Regional Office for Europe, 2006 (10).

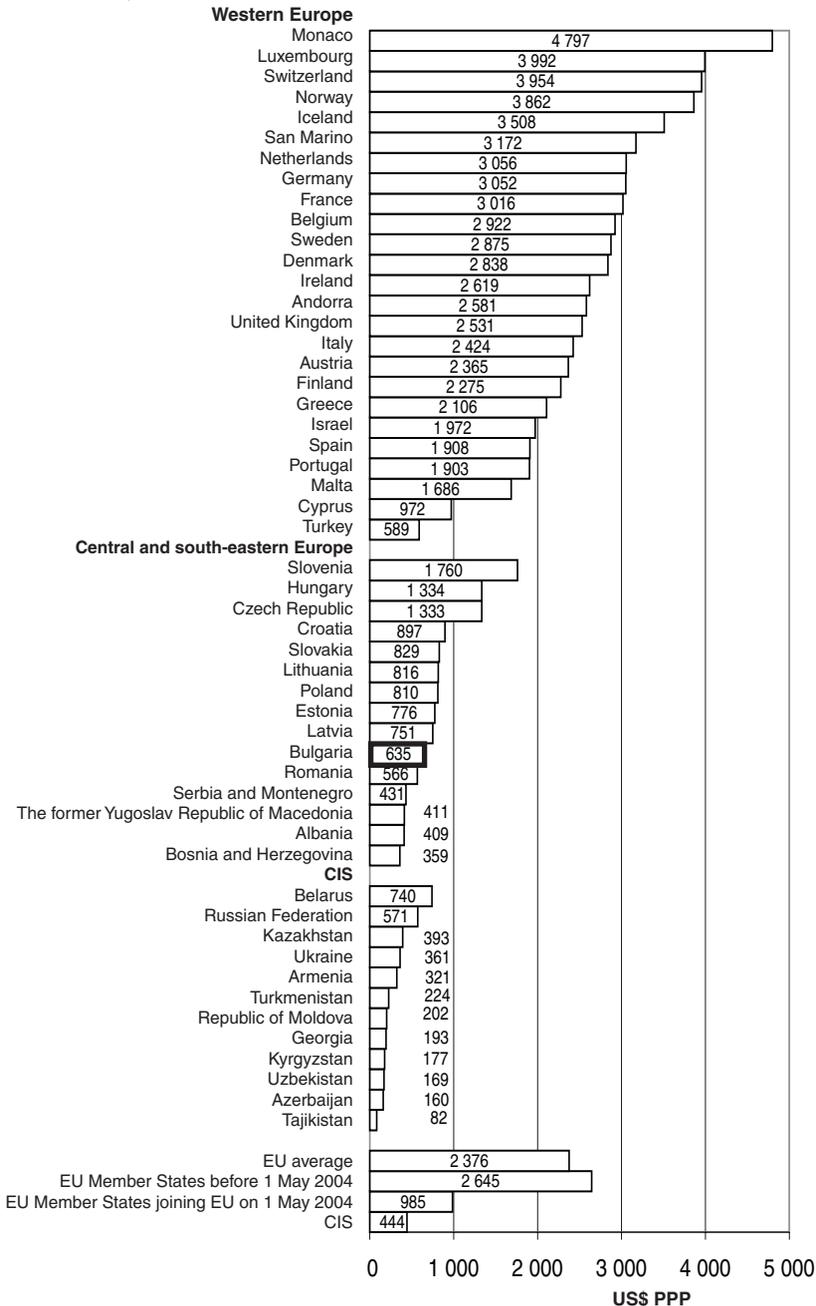
Table 3.2 Public expenditure on health according to financing institution (percentage of total public health expenditure) (million BGN), 2000–2004

Consolidated budget	2000	2001	2002	2003	2004
National Health Insurance Fund	127(13%)	428 (36%)	585 (41%)	775 (46%)	878 (55%)
Ministry of Health	292(30%)	493 (41%)	573 (40%)	598 (35%)	558 (35%)
Municipalities	416(42%)	184 (16%)	210 (14%)	219 (13%)	121 (7%)
Other ministries and institutions	126(13%)	75 (6%)	70 (5%)	104 (6%)	50 (3%)
Central budget	20 (2%)	16 (1%)	2 (0%)	2 (0%)	–

Source: Ministry of Health, 2005 (25).

Until now Bulgaria has not used the National Health Accounts system to systematically analyse national health expenditure. National regular statistics and reporting are used as a data source on health care expenditure, and these utilize approaches and assumptions different from National Health Accounts to estimate national health spending. Thus, the data provided by the national source might not be comparable to OECD or WHO estimates.

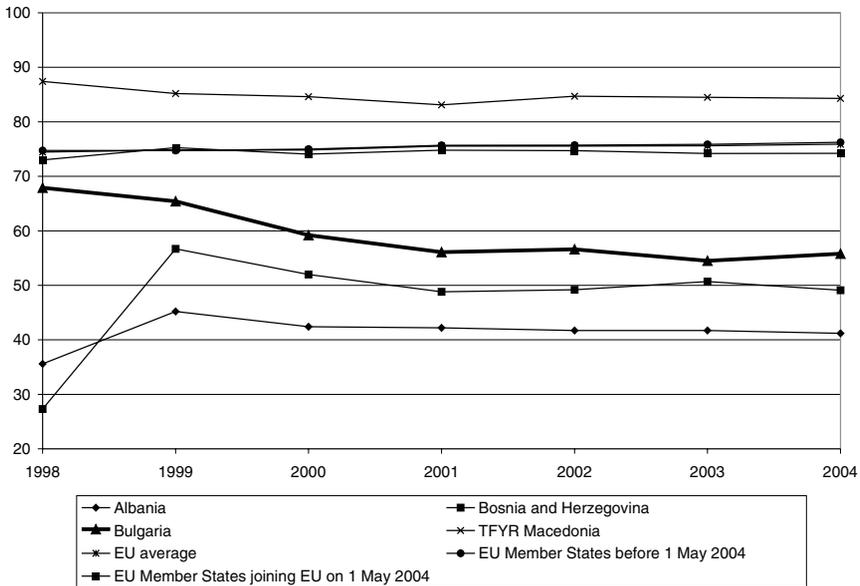
Fig. 3.4 Health care expenditure in US\$ PPP per capita in the WHO European Region, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2006 (10).

Notes: CIS: Commonwealth of Independent States; EU: European Union.

Fig. 3.5 Public sector health expenditure as a percentage of total health expenditure in Bulgaria, selected countries and averages, 1998–2004, WHO estimates

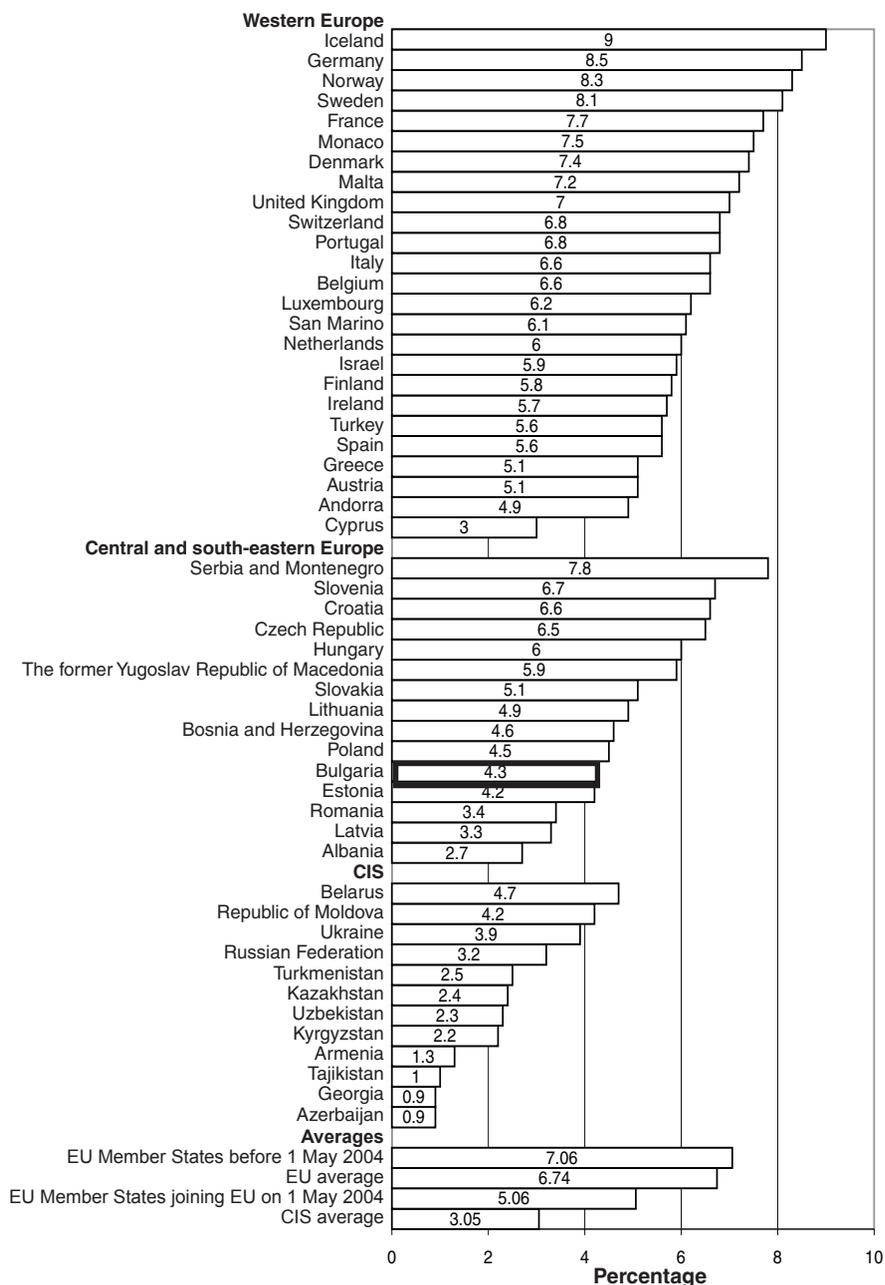


Source: WHO Regional Office for Europe, 2006 (10).

The public spending share of the NHIF expenditure has significantly increased since its establishment. In 2004, the NHIF covered 55% of all public health care expenditure, mainly owing to the growing share of spending on pharmaceuticals for outpatient care (going up by more than BGN 73 million) and hospital care (up by BGN 45 million). In 2004 pharmaceutical expenditure for outpatient care accounted for 30.7% of compulsory health insurance spending, almost equal to the share of expenditure for hospital care (31.8%). As presented in Table 3.3, the Bulgarian health system remains curative in orientation, with about 34.2% of NHIF funding allocated to hospitals.

The Ministry of Health is the second largest source of health care financing in Bulgaria. Its share in public health expenditure went sharply up in 2001 but has remained stable since then. In 2003 expenditure of the Ministry of Health on hospital care accounted for 60% of total state budget expenditure; mainly these resources went to cover operational and administrative costs of health facilities (Table 3.4). Allocations of external funds as well as national health control programmes accounted for about 20% of total state expenditure in

Fig. 3.6 Health care expenditure from public sources as a percentage of GDP in countries in the WHO European Region, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2006 (10).

Notes: CIS: Commonwealth of Independent States; EU: European Union.

Table 3.3 Compulsory health insurance expenditure by service category (thousand BGN)

NHIF expenditure		2000	2001	2002	2003	2004 (budget)	2005 (budget)
Primary		32 862	86 148	97 310	103 444	103 500	107 200
outpatient care	% of HIP	33.7	21.3	17.2	13.7	13.5	12.4
Special		11 807	57 407	72 636	82 859	94 000	107 400
outpatient care	% of HIP	12.1	14.2	12.9	11.0	12.2	12.4
Dental care		13 623	38 389	24 651	45 590	49 000	57 800
	% of HIP	14.0	9.5	4.4	6.0	6.4	6.7
Health		5 054	29 099	37 914	39 277	41 000	50 500
diagnostics	% of HIP	5.2	7.2	6.7	5.2	5.3	5.8
Outpatient		34 137	182 280	239 019	270 832	236 500	245 000
treatment							
medicines	% of HIP	35.0	45.1	42.3	35.9	30.7	28.4
Hospital care		0	10 781	93 276	213 024	245 105	295 100
	% of HIP	0.0	2.7	16.5	28.2	31.8	34.2
Other health		0	0	0	0	600	600
insurance							
payments	% of HIP	–	–	–	–	0.1	0.1
Total HIP	% of HIP	187 147	399 244	564 795	627 753	769 705	863 600
		73.0	83.3		85.9	87.6	87.9

Source: NHIF, annual activity reports (2000–2005).

Notes: * HIP: Health insurance payments; NHIF: National Health Insurance Fund.

2003. Through the national health control programmes the Ministry of Health funded the centralized procurement of a defined set of life-support and life-saving drugs, vaccines and consumables for health facilities, health prevention activities and diagnostics services. The Ministry of Health increased the budget for these services by 62% in 2003 compared to 2001.

At present the state budget and compulsory health insurance system are the main sources of health care financing but it is expected that the health insurance share of hospital financing will increase, gradually replacing the portion funded by state and municipal budgets.

Private health expenditure

Private expenditure on health has increased in many European countries since the 1990s and the increase in Bulgaria was among the sharpest (Fig. 3.7). This was influenced by the legalization of private practice in 1992 and by the introduction of co-payments for medical services.

Private expenditure as a percentage of total health expenditure increased from 34.6% in 1999 to 45.5% in 2003 and the share of out-of-pocket payments accounted for more than 99% of all private health expenditures in 2003 (24).

Table 3.4 Expenditure of the Ministry of Health by function (service) for 2003 (thousand BGN)

Service category	Total expenditure (TE)	TE including:		Growth in 2002 (%)	Growth in 2001 (%)
		Current expenditure	Capital outlay		
Ministry of Health, including:	607 668	567 690	39 979	4.5	23.0
– Health function (100%), including:	598 426	558 751	39 675	4.4	23.0
– Medical and health institutions supported by the budget (20.2%):	115 786	112 980	2 805	10.4	32.5
– Acute care centres		44 212		16.0	42.3
– Psychiatric hospitals		8 892		4.0	27.7
– Health and social care homes for children		17 070		2.0	23.0
– Regional Inspectorates for Public Health Protection and Control		22 774		5.4	26.4
– Hospitals (60.0%)	360 009	335 236	24 774	12.2	25.8
– Other activities: centralized supplies, national programmes and loans (19.8%)	122 631	110 535	12 096	-16.7	8.8

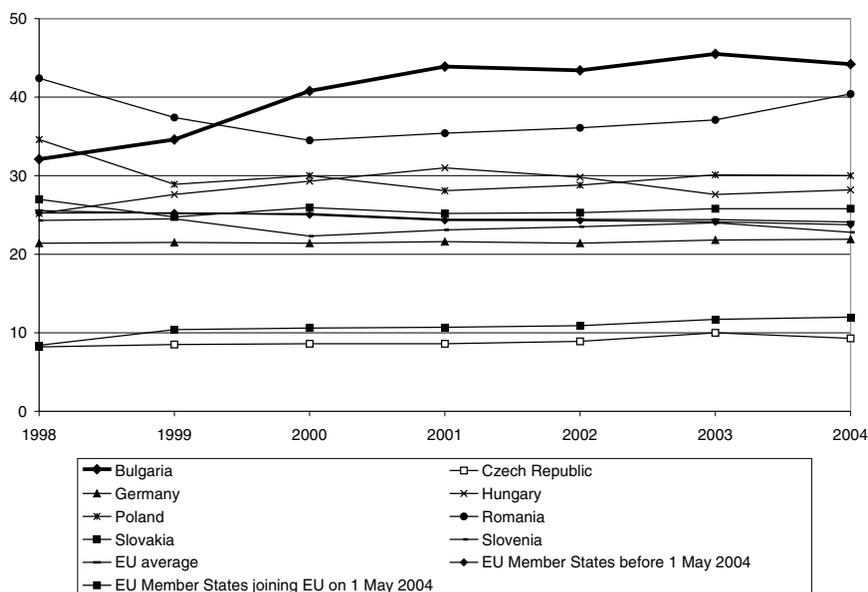
Source: Ministry of Health, 2004 (26).

From 1997, when the data became available, to 2005 the share of household health expenditure showed a gradual increase and more than doubled during the decade, as presented in Table 3.5. According to data from the household budgets survey, out-of-pocket expenditure on health amounted to €50.5 per capita in 2005, showing a sevenfold increase since 1997 (2).

Data on out-of-pocket payments on health might be underestimated as they do not include informal payments for health (charges for goods and services that are supposed to be free). Informal payments are common in many parts of the world, including Bulgaria. At the time of writing, the Bulgarian National Statistical Institute is trying to track informal payments, but this requires significant human and financial resources.

VHI expenditure as part of private expenditure remains low, mainly because the State provides comprehensive benefits, and participation in the national health insurance scheme is compulsory. In addition, the Government has

Fig. 3.7 Private expenditure on health as a percentage of GDP in Bulgaria, selected countries and averages, 1995–2004



Source: WHO Regional Office for Europe, 2006 (10).

tended to rely on other methods of shifting health care costs to consumers, such as implementing user charges rather than promoting and subsidizing VHI companies. Bulgaria is one of the countries where patients are not accustomed to paying a third party and prefer to pay their doctors or hospitals directly. However, since VHI was first introduced in 1989, its expenditure has increased by up to 0.7% of total expenditure on health in 2003 (24).

Table 3.5 Expenditure of households on health as a percentage of total household expenditure, 1997–2005

Years	1997	1998	1999	2000	2001	2002	2003	2004	2005
% of expenditure on health in total household expenditure	2.0	2.4	2.9	3.6	3.9	4.1	4.3	4.5	4.7
Average per capita, at average exchange rate (€)	6.9	12.7	18.9	25.5	28.1	33.6	38.8	44.9	50.5

Source: National Statistical Institute Bulgaria (NSI), 2006 (2).

3.2 Population coverage and basis for entitlement

Population coverage

The health insurance system is mainly represented by the NHIF and to a much lesser degree by VHI companies (10 in 2006) providing complementary health coverage as well as services covered within the basic benefits package.

The compulsory health insurance system is designed to function as a state monopoly. It has the exclusive right to grant compulsory health insurance and to guarantee the observance of insurance rights for all citizens. The system is socially oriented and is one of the pillars of social protection of the population. The NHIF aims at guaranteeing for each Bulgarian free (at the point of delivery) and equal access to medical care at all levels of the health system and high-quality medical services for all patients.

In accordance with the Health Insurance Act health care is provided to all Bulgarian citizens, Bulgarian citizens who are also citizens of another country but permanently live in Bulgaria, foreign citizens or individuals without citizenship but with a long-term residence permit, and individuals with refugee or humanitarian status or those granted the right of asylum.

The compulsory health insurance system represented by the NHIF is funded primarily from payroll-based contributions made by working individuals, and general revenue, from which contributions are paid on behalf of the non-working population. The compulsory health insurance contribution is 6% of an individual's assessed income. It is divided between the employer and employee at the ratio 70:30 for 2006 and from 2009 this will be 50:50 (27). The contributions are not related to the expected cost of care and may only be paid by the insured, the state or municipal budget, or the employer.

Sole entrepreneurs, individuals who have established limited liability companies, partners in trade companies, freelance practitioners, and individuals who work without legal terms of employment are responsible for paying their contributions (6% of their assessed income).

State and municipal budgets cover health insurance for pensioners; individuals receiving unemployment benefits; parents or spouses who take care of a disabled person with lost labour capacity of over 90% and who permanently needs help; individuals and members of families with a right to social welfare and for underage orphans; war veterans and the military disabled; those who become disabled as a result of defending their country or fulfilment of their

official duty; individuals under proceedings for refugee status or right of asylum; prison inmates; individuals without income who are accommodated in homes for children and youths or social care establishments; high school students up to the age of 26; and children younger than 18 years old.

Employers pay for individuals working under official employment contracts, for individuals on unpaid leave, for employees of the Bulgarian Orthodox Church and other religions acknowledged by normative order, and for individuals receiving compensation for temporary capacity loss due to illness, pregnancy, childbirth or on maternity leave.

There is also a group of individuals who are neither insured by employer nor covered by the state or municipal budgets. In most cases these are people that are in need of social assistance but are not entitled to it. They are usually from low-income groups or groups without any income and are not able to pay the contributions. They belong to the population groups that do not benefit from the compulsory health insurance system and cannot afford to pay for private medical care. According to the NHIF estimates in 2006 around 1 million Bulgarian citizens do not pay compulsory health insurance contributions and thus do not benefit from health insurance.

The VHI market offers complementary insurance and also covers services provided as part of the basic benefits package. Besides the package covered by the NHIF all citizens are free to buy different insurance packages on the market at their own expense.

VHI does not play a dominant role in funding health care owing to the breadth of coverage (almost universal) by the basic benefits package and the low income of the population. The Open Society Institute and Soros Foundation survey revealed that in 2003 VHI coverage was less than 3% (18).

So far only high-income groups and some private and public companies can afford VHI. Some large, stable companies in Bulgaria are paying voluntary insurance for their employees. The most vulnerable groups such as the elderly and those with chronic diseases, as well as children, cannot afford VHI due to high insurance premiums and low incomes.

Despite the high premiums demanded by VHI companies, they are unable to offer high-quality services requested by high-income groups, as the services covered are mostly provided in public health institutions with a low quality of services provision.

Benefits

The compulsory health insurance system guarantees a basic package of health services to the population. The National Framework Contract defines the basic benefits package provided for the insured population and the criteria for its establishment. The National Framework Contract is valid for one year, until the signing of the next one. According to the latest National Framework Contract the basic benefits package includes the following services:

- health care for chronic diseases;
- medical and dental prevention and promotion;
- emergency medical care;
- outpatient medical and dental diagnostics and treatment;
- hospital diagnostics and treatment;
- maternal and infant health care;
- medical rehabilitation;
- care for the elderly;
- palliative health care;
- surveillance, home visits and consultations;
- transportation to services for medically eligible patients.

Some social groups, such as children, pregnant women and breastfeeding mothers and some socially disadvantaged ethnic groups are included within a special health insurance policy.

The National Framework Contract defines the reimbursement list of drugs covered by the NHIF and those diseases for which drug treatment is reimbursable. The list of diseases is based on the EU principles and the WHO essential drug list but it mostly depends on the NHIF budgetary arrangements. The list mainly includes diseases with high social impact and those defined as a national health priority. The brand names are not defined in the NHIF drug list, allowing for reimbursement of both the proprietary and the generic drugs. Reimbursement only takes place when a drug is prescribed by a GP (or specialist) and purchased in a pharmacy which has a contract with the respective RHIF.

Services that are only partially reimbursable or not included in the basic benefits package are paid out of pocket or through VHI, for example co-payments for certain drug groups introduced in Bulgaria for outpatient care. Citizens have the right to purchase complementary health insurance packages from the VHI funds, this guaranteeing a mixed system of public–private financing.

Currently, the benefits guaranteed within the basic benefits package are difficult to cover with the insufficient financial resources pooled through the

compulsory health insurance mechanism. Under-the-counter payments are still common for drugs and hotel services in hospitals, such as bed linen and food. The opportunities for increasing the health insurance contributions or reducing the basic health insurance package are currently being discussed; however, such potentially politically unpopular steps require lengthy preparation.

Each VHI company provides a defined and licensed benefits package. In accordance with Article 99e of the 1998 Health Insurance Act a benefits package could be established or changed with the approval of the FSC.

VHI companies cover complementary services as well as the basic benefits package services. Visits to specialists without GP referral are possible, with the patient paying 100% out of pocket or through a VHI package, whereas GP referrals to specialists are covered by the NHIF. However, for most risks the level of NHIF and/or VHI coverage is not clearly defined, thus increasing the burden of out-of-pocket payments for patients.

In order to address these problems, a Health Insurance Code is planned, to be drafted in 2007 to consolidate the existing legislation related to the health care sector and to ensure clearer regulation in the field of compulsory and VHI schemes and the social protection of uninsured individuals.

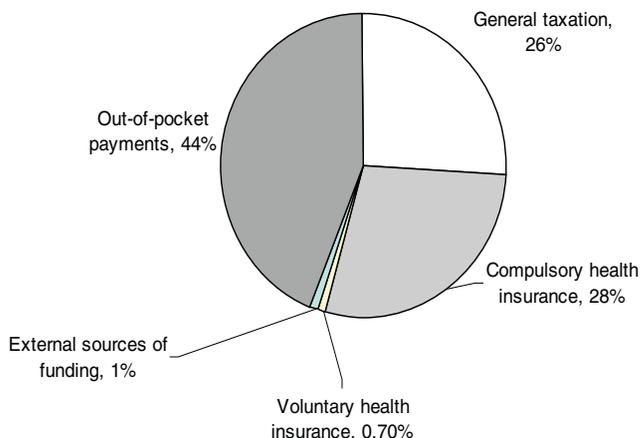
3.3 Revenue collection/sources of funds

The revenue flows to the health system through general taxation, compulsory health insurance contributions, household private expenditure (out-of-pocket payments, VHI) and external funding are presented in Fig. 3.8.

Table 3.6 lists the sources of health care revenue as a percentage of total expenditure on health. Revenue from general taxation has been decreasing gradually as the compulsory health insurance revenue has been increasing from 1999 to 2003 (24). More recent data are not available yet. It is one of the Government priorities to increase social health insurance revenue to make it the main source of public health care revenue.

Private expenditure sharply increased in Bulgaria through the 1990s and, in accordance with WHO estimates (10), was one of the highest among the EU15 and EU10 countries and was twice as high as respective averages in 2004. Out-of-pocket payments accounted for the biggest share of private expenditure, as Table 3.6 shows, but these estimates might be underestimated, as it is difficult to capture informal out-of-pocket payments (those charges for services and supplies that are supposed to be free). There are no valid national data available for out-of-pocket spending on health as these kinds of surveys are costly, both in

Fig. 3.8 Sources of health financing, 2003



Source: World Health Organization, *World Health Report 2006* (24).

Table 3.6 Sources of health revenue as percentage of total health expenditure, 1999–2003

	1999	2000	2001	2002	2003
Public health expenditure	65.4	59.2	56.1	56.6	54.5
Compulsory health insurance	6.5	7.7	20.1	23	28.1
General taxation	58.9	51.5	36.0	33.6	26.4
Private health expenditure	34.6	40.8	43.9	43.4	45.5
Out-of-pocket payments	34.3	40.4	43.5	42.7	44.8
Voluntary health insurance	0.3	0.4	0.4	0.7	0.7
External sources of financing	0.5	2.0	1.5	1.3	1.0

Source: World Health Organization, *World Health Report 2006* (24).

terms of resources and time, and have not yet been conducted in full. The VHI market is still at its primary stage in terms of health system revenue collection and at the time of writing, informal out-of-pocket spending remains the dominant source of revenue for financing the health system in Bulgaria.

Foreign aid is substantial and includes World Bank loans and EU programmes such as PHARE, Tempus and Interreg. However, according to the *World Health Report 2006*, this kind of aid represented just 1% of all health resources in 2003 (24).

3.3.1 Compulsory sources of financing

General taxation

General taxation is non-earmarked revenue, flowing to the Ministry of Health budget from central or municipal budget sources of tax revenue and from “in-kind” revenue received by the RIPHPIs, the National Centres and the Bulgarian Drug Authority as fee-for-service or fines and penalty charges.

The central budget tax revenue includes revenue from income tax, corporate tax and value-added tax (VAT) collected by the National Revenue Agency. On 1 January 2006 the National Revenue Agency and its 28 divisions started their operations on tax administration. The Agency was set up in accordance with the proposal of the International Monetary Fund and as part of a wider project to improve revenue collection, including income tax, VAT, patent taxes and corporate taxes, as well as health insurance and pension contributions.

Municipal budget tax revenue accumulates from some local taxes such as waste charges, building tax and asset purchase tax and is collected by municipalities. State and municipal tax rates usually respond to short-term fluctuations in the economy and, as a result, tax rates and revenues usually change annually.

The central budget tax is collected by the 28 regional offices of the National Revenue Agency and allocated to regional tax directorates and then to the accumulating accounts of the general tax directorate at the Ministry of Finance. Local taxes and fees are payable to the municipal tax services where they are pooled with the municipal budget (for more information see Section 3.4 Pooling of funds).

The amount of the tax revenue allocated for health is not fixed and is estimated annually as a part of the State Budget Act. In 2004 about 14.6% of the state revenue was allocated to the health sector. Similarly, municipalities themselves estimate the share of the municipal budget allocated to health annually, although this share is usually insignificant (28).

Compulsory health insurance contributions

Compulsory health insurance contributions are pooled by the NHIF and since its establishment in 1999 the share of compulsory health insurance has increased, reaching 55% of public health revenue in 2005 (29). Although the national data significantly differ from other data sources such as the *World Health Report 2006* (presented in the Table 3.6), compulsory health insurance contributions are the major health revenue source in Bulgaria.

Health insurance contribution is income-based and is determined on an annual basis in accordance with the Health Insurance Act of 1998 and its amendments. The compulsory health insurance contributions of the employed are 6% of the payroll shared between the employee and the employer. This share was originally at an 80:20 ratio, but in accordance with the amendments to the Health Insurance Act, this ratio will be 50:50 by 2009, with equal shares from employers and employees (Table 3.7).

Table 3.7 Employee:employer contribution rate, 2000–2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Employee:										
employer										
contributions	80:20	80:20	75:25	75:25	75:25	70:30	65:35	63:35	55:45	50:50

Source: 1998 Health Insurance Act, art.40 (1) 1: last draft of 3 October 2006 (17).

Current health care reforms are focused on increasing health insurance system revenue and introducing legislation that allows an increase in health insurance tax collection rates, which are becoming a serious problem for Bulgaria as well as for some other eastern European countries. Many private companies (mostly small- and medium-sized ones) declare low pay levels for their employees in order to reduce their tax and health insurance burden. The effects of such practice are statistics depicting low pay and direct losses for the state budget and the NHIF due to minimal contributions. As a result, the Government funds health care for about 30% of the population, who do not pay contributions.

3.3.2 Voluntary health insurance

Under the 1998 Health Insurance Act, VHI provides extra insurance for any individual. Over and above the package covered by the NHIF, all citizens are free to buy additional insurance packages. VHI can also cover the cost of services included in the basic benefits package.

VHI is provided by voluntary health insurance companies (VHICs); their number is increasing slowly. There were two licensed VHICs in 2001, six in 2003 and ten in mid-2006. VHI is a highly saturated market with the Bulgarian Health-Insurance Company “Zakrila”, Health-Insurance Fund “MEDICO-21” and the United Health-Insurance Fund “Doverie” controlling 74.1%, 13.7% and 8.0% of the VHI market, respectively (Table 3.8).

In addition to VHICs, almost all private insurance companies offer VHI schemes for the population. The insurance premium (contribution or insurance package price) depends on the individual risk of a patient for individual contracts or on the group risk for group contracts. VHI premiums range from BGN 150–300 (€77–153) annually with a ceiling of up to BGN 700 (€358) per person for outpatient care and up to BGN 25 000 (€12 773) for inpatient hospital care.

The health insurance contributions are determined by age, sex and health status. Higher-risk groups such as the chronically ill are often refused VHI coverage. Pre-existing illnesses are experience-rated for individuals. They might not be covered by VHI companies and might be community-rated if a VHI package is provided for corporate groups, allowing for risk dispersion and lower individual premiums.

Hospital care packages accounted for 36.37% of the total health insurance premiums revenue for all VHI companies in 2004. It was followed by outpatient care packages (22.78%), cost-reimbursement packages (16.58%), health prevention packages (16.06%), packages for health-related services (4.39%), high-technology health care packages (1.99%), dental services packages (0.84%) and other service packages (0.99%) (Table 3.8).

The highest share of VHI revenue flows from corporate clients (higher compared to that from private sources). Employers mostly cover regular medical check-ups and preventive services that are not covered by the NHIF in accordance with the National Labour Regulations. Often, VHI for corporate clients only covers a certain list of facilities suggested by the employers. Medical claims for other health facilities are not covered by such contracts.

3.3.3 Out-of-pocket payments

In 2004 out-of-pocket payments accounted for 43.5% of total health expenditure and they remain the dominant form of health care revenue (10). Out-of-pocket payments include direct payments, cost-sharing and informal payments.

Direct payments

Direct payments as payment for goods and services that are not covered by any form of insurance exist in Bulgaria. Direct payments occur as out-of-pocket payment for specialist services without GP referral, as mentioned earlier. Another form of direct payment also occurs when a doctor refers a patient for consultation or tests to a health institution which has not signed a contract with NHIF. In this case the patient should cover the treatment out of pocket, despite having been referred by the GP.

Table 3.8 Breakdown of revenue for the health plans offered by voluntary health insurance companies (thousand BGN), 2004

Health plans offered by VHIFs	BHIC "Zakrila" JSC	HIF "MEDICO-21" JSC	UHIF "Doverie" JSC	HI "DZI" JSC	VIN "ZDRAVE" JSC	BZF JSC	Bulstrad - HI JSC	HIC "Bulgaria Zdrave" JSC	HIC "Nadejda" JSC	HIC "Planeta" JSC	Total
Revenue	7 190	1 328	773	201	96	67	47	0	0.5	0	9 704
Improvement of health and disease prevention	1 414	0	125	8	0	3	10	0	0	0	1 559
Outpatient healthcare	1 805	20	317	0	0	41	26	0	0.1	0	2 211
Inpatient health care	1 969	1 308	220	0	0	24	9	0	0.1	0	3 529
Dental care	80	0	0	0	0	0	1	0	0	0	81
Health services supporting social activities	371	0	551	0	0	0	0	0	0	0	426
Reimbursement of costs	1 551	0	561	0	0	0	1	0	0.2	0	1 609
Complex medical care	0	0	0	1 931	0	0	0	0	0	0	193
Other plans	0	0	0	0	96	0	0	0	0	0	96
Health care expenditure as a percentage of the revenue	58	53	23	7	0	1	39	0	44	0	53

Source: Financial Supervision Commission. Annual activity report 2004 (30).

Note: VHIF: Voluntary health insurance fund

Since 2001 health facilities have been developing their own price lists of fee-for-service without a referral (when patients can exercise their personal choice of doctor). Patients might also pay for luxury hospital “hotel services” such as a single room, television, or better food. Services such as plastic surgery are not included in any health insurance packages and should be paid for out of pocket.

Cost-sharing

Cost-sharing occurs in the form of co-payments when the patients are charged a flat rate for services. Cost-sharing was established by the 1998 Health Insurance Act as part of the compulsory health insurance and was introduced for outpatient medicines except for treatment of chronic diseases. The co-payment amount is defined in the 1998 Health Insurance Act (Article 37, paragraph 1). The Health Insurance Act also defines co-payment fees for visits to physicians and dentists and for inpatient care. These apply to all patients, except for some vulnerable groups such as children, unemployed individuals, those with income below a certain threshold and the chronically ill.

Since 2000, user charges are paid by patients during each visit to a GP, a specialist, a health diagnostics laboratory or a hospital for the use of services covered by the NHIF. In accordance with Article 37, paragraph 1 of the 1998 Health Insurance Act, these charges amount to 1% of the minimum monthly salary (MMS) per outpatient visit and 2% of the MMS per day of hospitalization, up to 10 bed-days per year. These co-payments vary according to the MMS in the country, which was set at 160 BGN (€81.80) per month in 2006, and are paid by the patients directly to the provider at the point of delivery.

In accordance with Article 37, paragraph 3 of the 1998 Health Insurance Act, the following individuals are exempt from paying user charges:

- individuals with illnesses specified in a list by the National Framework Contract;
- individuals under the age of 18;
- the unemployed;
- individuals with lost capacity due to national defence operations;
- war veterans;
- disabled ex-servicemen;
- individuals under arrest or imprisoned;
- low-income individuals receiving social benefits in accordance with the Act on Social Support;
- individuals without income, living in child or social care facilities;
- medical personnel.

Despite concerns over its regressive character, cost-sharing continues to be a means of restricting unnecessary demand for health care and of additional income for the system. It also aims to maintain providers' practices and to procure medical equipment and consumables (syringes, surgical gloves, etc.).

However, cost-sharing is a barrier and financial burden for low-income and retired people who visit health care providers more often than any other group (for example, for drug prescribing, consultations with specialists, diagnostic examinations). Since the current minimum monthly wage of 160 BGN (€81.8) is below the "subsistence minimum", co-payment reduces the resources available for food and other basic living expenses. Theoretically, the law provides equal access to health care but practice has proved the opposite to be the case.

Informal payments

Informal payments include all unofficial payments for goods and services that are supposed to be free and funded from pooled revenue. As in other central and eastern European countries, informal payments for health care services were common in Bulgaria before the transition and have become increasingly common since the 1990s. In a survey conducted in 1994, of 1000 respondents 43% reported having paid cash for officially free services in a state health facility (31). A survey in Sofia in 1999 found that 54% of those asked had made informal payments for state-covered services (32).

Patients usually pay "under the table" to decrease the waiting time for services, to go directly to a specialist instead of being sent to a GP, or to secure better conditions or better service quality in hospitals. Spending on items such as purchasing of food or consumables for hospitalization is also considered as informal payments. According to a nationally-representative survey funded by the Open Society Institute and Soros Foundation and conducted by the Agency for Social and Marketing Studies "Noema", in Sofia in 2001 approximately 25% of hospital patients faced the problem of "unregulated payments" for check-ups, tests, treatment and/or surgery (32). Considering the generally low level of income for the country, the population is spending significant amounts of money on health care services by paying:

- taxes;
- co-payments;
- fees for private physicians and paid services without GP referral;
- premiums for VHI;
- payment of medical services, rendered under the terms of medical insurance contracted with life insurance companies;
- informal payments.

There are different opinions about the volume of such costs. However, different sources estimated informal payments alone to be at a minimum of BGN 800 million (€409 million) in 2005 (33), which is an enormous additional compulsory resource paid and at the same time it contains potential for corruption, which would also discredit the health system reform.

Inclusion of hospital care in the system of compulsory health insurance has brought some reduction in informal payments for consumables, materials and/or medicines used during hospitalization, but has not affected informal payments to doctors, nurses and hospital attendants.

3.3.4 External sources of funds

Since the mid-1990s, the Bulgarian health system has received sizeable influxes of foreign assistance, including governmental loans, international projects, and grants from various governments, institutions and organizations. However, according to the *World Health Report 2006* the share of external funding accounted just for 1% of total health expenditure in 2003 (24).

The major share of foreign aid was received from World Bank loans and EU programmes that were allocated for structural changes in the health system. A US\$ 47 million fund loan agreement to finance a health sector restructuring project was ratified in 1996. This was funded by the World Bank (US\$ 26 million), the Council of Europe Social Fund (US\$ 11 million) as well as the EU PHARE programme (US\$ 2.3 million). The remaining US\$ 7.7 million came from the Bulgarian Government. The project lasted until 2001, was managed and coordinated by the Ministry of Health and focused on developing local capacity in health policy and administration, primary care strengthening, emergency care restructuring and improving haemotransfusion services. In June 2000 the World Bank approved a second loan of US\$ 86.96 million to support health care reforms in Bulgaria, development of information systems for the health insurance system and restructuring of outpatient and inpatient care.

The major areas of support under the PHARE programme are, among others, improving emergency health care, improving the quality of GP and nurse training, introducing private medical practice, creating local capacity in health economics and management, restructuring the pharmaceutical sector and introducing a new drug policy, and developing a compulsory health insurance scheme.

United States Agency for International Development (USAID) projects and the German Government-sponsored TRANSFORM programme aim to improve the administrative and information capacity of the health insurance system, human resources development and training of personnel.

WHO provides constant technical assistance focusing on development of health reforms and new health policy, mother and child health, infectious and chronic diseases and health promotion.

A large share of foreign aid is received through grants from foreign institutions and governments, such as the Swiss Government and the Swiss Red Cross, the Spanish Agency for International Cooperation, the Japanese Agency for International Cooperation and the United Nations Development Programme (UNDP). Projects are focused on training of medical personnel in health management, procurement of equipment, infrastructure improvement and health promotion. These projects are largely implemented jointly with the Bulgarian counterparts that include the Ministry of Health, academic and research institutions and NGOs.

3.3.5 Other sources of finance

A relatively small amount of revenue, compared to other sources, comes from voluntary charitable donations by individuals, private companies, foundations and NGOs.

In accordance with the Labour Code, regular check-ups are required for employees of public and private companies. This ensures that employers sign contracts with health facilities in order to provide their employees with the required health services.

3.4 Pooling of funds

The pooling and allocation of funds in the public sector is different from the private sector. In the public sector the National Revenue Agency is in charge of pooling together funds for both the central budget and the NHIF. In the private sector voluntary health insurance companies pool and allocate revenue received from individuals/companies with signed contracts.

3.4.1 Pooling agencies and mechanisms for allocating funds

The National Revenue Agency is responsible for pooling and distributing tax revenue, including from general taxation, health insurance contributions and subsidies from the state budget for special population groups. It distributes the revenue directly to the corresponding agency's accounts (ministries, etc.) within 72 hours of collection. The amount of funds distributed to each agency or sector depends on the approved budgets.

Compulsory health insurance contributions

Compulsory health insurance contributions are collected by the 28 territorial directorates of the National Revenue Agency, which transfer them daily to the National Revenue Agency's pooling account. Funds received by the Agency are then allocated daily to the accumulation account of the NHIF, which in turn distributes the funds to its 28 RHIFs. The NHIF budget allocation to subregional level is based on population numbers and age in the region, historical allocations and estimates of future health-related needs in the region.

In order to contain cost and control expenditure RHIFs' budgets are prospective and disaggregated by line-items with monthly and annual expenditure limits and approved by the NHIF. Thus, RHIF budgets are spent in accordance with these prospectively approved line-items and in practice RHIFs manage only their administrative expenditures. However, reallocation of funds according to line-items or requesting additional funding for a certain budgetary line within the approved period (one fiscal year) is possible, dependent on NHIF approval.

Revenue from taxation devoted to health

The National Revenue Agency pools the revenue from general state taxation (including general income tax, corporate taxes, excise, VAT, and patent tax) into the accumulating accounts of the Regional Tax Directorates at the Ministry of Finance. Taxes collected at the Regional Tax Directorate are then pooled together at national level by the General Tax Directorate to create a state budget. The state budget is allocated to various ministries depending on previously approved annual budgets. Funds allocated to the Ministry of Health are mostly used for the direct funding of some expensive pharmaceuticals, state-funded hospitals and for the implementation of national programmes. Other parallel ministries also receive health care funds from the state budget.

Until the end of 2004, the state funds were allocated to municipalities as a lump sum, allowing municipal-level decision-making on health spending matters. In 2005 the State Budget Act defined a proportion of the state budget allocated for municipal dispensaries and municipal hospitals (or hospitals with municipal interest in their capital). Such centralized and earmarked allocation of the state health budget to municipalities was brought about by prioritized financing of other sectors and a reasonably low level of funds allocated for health facilities from municipal budgets in 2003–2004.

3.5 Purchasing and purchaser–provider relations

Organizational relations between purchasers and providers in the reformed health system are based on three types of model: the integrated model, the contract model and the reimbursement model. In the integrated model the payer of health care and the provider of health care are the same organization. This is in contrast with the contract model where the contracts are between payers and providers. In the reimbursement model, the beneficiary contracts with the provider and is reimbursed by the payer. The legal basis for using these models can be found in the 1998 Health Insurance Act.

Public sector

For the NHIF, the relationship between purchaser and health care provider is based on the contract model where both public and private providers only receive payments from the NHIF if they have signed a contract with the Fund through its regional branches. This contract is the National Framework Contract, which is signed on an annual basis to regulate the format and operational procedures of the health insurance system. The National Framework Contract regulates the health care providers, the scope of health services, the payment scheme, the cost of services, the quality of health care indicators and the mechanisms for the monitoring and enforcement of contractual agreements.

In accordance with the National Framework Contract, the bodies defining purchaser–provider relations are the NHIF and the professional associations of health care providers (i.e. doctors and dentists). Within the National Framework Contract the NHIF is represented by nine members of the Management Board and the NHIF director. The professional associations of doctors and dentists (BMA and UDB, respectively) are represented by 10 members (seven from BMA and three from UDB).

In 2005, 16 809 individual contracts were signed between provider organizations and RHIFs within the compulsory health insurance system. These included 5280 contracts with primary outpatient provider organizations; 3276 contracts with organizations providing specialized outpatient care and health diagnostics services; 5660 contracts with dental outpatient provider organizations; 2292 contracts with pharmacies; and 301 contracts with hospitals (29).

Private sector

VHI is carried out by limited liability companies, registered according to the Commercial Law. VHICs in Bulgaria contract with both private and state (municipal) health facilities, and negotiate premiums depending on the contract coverage and quality of services provided.

The VHI contracts involve responsibilities for the company and the patient in the case of individual insurance, for the family in the case of a family insurance package, and for the employer in the case of a corporate health insurance contract (17). Patients are also free to purchase services directly with providers through out-of-pocket payments in both the private and public health sectors.

3.6 Payment mechanisms

The main sources of health care financing include compulsory and VHI contributions, taxes, and formal and informal cost-sharing.

Until the reforms, provider organizations were allocated an earmarked budget, determined mainly on a historical basis and the key factors that were considered in allocating funds were numbers of staff and beds. High bed and staff numbers were rewarded, and high levels of patient admissions and long hospital stays were common. This was disaggregated by budget lines such as capital expenditure, salaries, consumables, maintenance of buildings and equipment, among others. Reallocations between the budget lines were not possible, and there were few incentives to manage more efficiently and few cost-control mechanisms.

Amendments to the People's Health Act of 1997 enabled health facilities to become juridical entities. This status was confirmed by the Health Care Establishments Act.

New approaches for management of financial resources were introduced that aimed for more efficient allocation and use of resources. The contractual system was introduced between the NHIF and health care providers as well as between municipal authorities and municipal health care facilities. State health care facilities are still fully funded by the state budget allocated by the Ministry of Health. These are 28 RIPHPIs, 28 national centres for emergency care, 11 state psychiatric hospitals, and 32 health and social care children's homes. Other health providers receive state funds through national targeted programmes and centrally procured medicines and consumables.

Municipalities continue funding all municipal hospitals regardless of whether they have a contract with the NHIF, but they finance only a portion of the costs of contracted hospitals.

3.6.1 Paying for health services

Since the health system restructuring, Bulgarian health providers are mainly reimbursed prospectively for the services they will provide to the population on a per-case and per-capita basis. This means that actual payment rates are agreed in the contract before the treatment takes place. Prospectively set payment rates increase the incentive for efficiency because the health provider faces higher financial risk. Each year the NHIF, together with the Bulgarian Medical and Dentists Unions, negotiates payment mechanisms to the health facilities contracted with the NHIF.

Some types of health provider receive fee-for-service payments, which are a typical form of retrospective reimbursement. The payment methods currently in use are presented in Table 3.9.

Hospitals receive funding mostly through case-based payments (clinical pathways). Case-based payments (clinical pathways) were introduced in 2001 as part of the National Framework Contract, based on a single flat rate per pathway. In 2001 there were 158 diagnoses grouped in 30 clinical pathways. The number of clinical pathways increased from 40 in 2002 to 120 in 2005 (29), to 298 in 2006 and will reach 299 in 2007 (19).

The flat rate for a clinical pathway reimbursed by the NHIF changed as well. In 2001 the average rate per clinical pathway was BGN 140 (€71), in 2002 it increased to BGN 290 (€148) and in 2003 to BGN 370 (€189) (34). The flat rate is calculated based on the cost of the medical activities, auxiliary services provided to patients during hospitalization or temporary disability and up to two outpatient medical examinations and consultations after the patient has been discharged from hospital. NHIF payments for working on clinical pathways are not realistic as they do not represent the real costs involved.

Hospital contracts with the NHIF specify the maximum number of cases; these can be increased by 20% during the period of the contract, but when this occurs the NHIF reimburses at a lower price than that agreed in the contract for the specified number of cases.

Some health care facilities are funded by the state budget allocated by the Ministry of Health, including the RIPHPs, national centres for emergency care, state psychiatric hospitals and health and social care children's homes. State psychiatric hospitals and health and social care children's homes are paid per

diem by the Ministry of Health, covering all services and expenses per patient per day (nursing, overheads, food, etc.) as well as capital investments.

Additional revenue flows to hospitals by means of co-payments that are compulsory for the patients (2% of MMS per day of hospitalization), as was described in Subsection 3.3.3, and through fee-for-service payments (paid services). Each health facility develops its own price list for paid services.

Primary health providers are reimbursed by the NHIF on a contractual basis according to the National Framework Contract. These contracts are based on monthly per-capita payments per insured person on the patient list. There is also remuneration for working in sparsely populated and/or remote regions with unfavourable conditions and bonuses for provision of so-called “socially important” services, such as prevention services. This is a per-capita payment combined with periodic balancing. Primary health care providers are also paid

Table 3.9 Payment mechanisms

Provider organization	Central government budget	Compulsory health insurance fund	Voluntary health insurance	Consumers
State and municipal hospitals	Per diem only for psychiatric hospitals, health and social care children's homes	Per case (clinical pathway) with a set number of diagnoses and flat rate for each clinical path	Fee-for-service	Co-payment 2% of min. salary for each visit or direct payment for PP
Private hospitals		Per case (clinical pathway)	Fee-for-service	Co-payment 2% of min. salary for each visit or direct payment for PP
Municipal hospitals	Earmarked subsidy for municipal hospitals and dispensaries	Per case (clinical pathway)	Fee-for-service	Co-payment 2% of min. salary for each visit or direct payment for PP
Specialized outpatient care		Fee-for-service, co-payment for prescribed outpatient drugs	Fee-for-service	Co-payment 1% of min. salary for each visit or direct payment for PP
General practitioners		Per capita, co-payments for prescribed outpatient drugs	Fee-for-service	Co-payment 1% of min. salary for each visit for compulsory health insurance or fee-for-service
Laboratories		Fee-for-service	Fee-for-service	2 BGN for each visit or direct payment for PP

fee-for-service for those patients that are not on their list. These practitioners are funded only from the NHIF and private out-of-pocket payments and they do not receive any state funding. If primary health providers do not contract with the NHIF, all the revenue is received from fee-for-service payments. Further information on primary care providers can be found in Subsection 3.6.2.

Specialized outpatient care and laboratories are reimbursed by the NHIF on a contractual basis and by means of fee-for-services payments.

Dental care is paid for mostly out of pocket, based on fee-for-service, although the NHIF and the Bulgarian Dentists' Union negotiate defined prices for a limited number of dental services included in the basic benefits package covered by the NHIF (see Section 6.12).

3.6.2 Paying health care personnel

Health personnel reimbursement is different for the outpatient and inpatient sectors. This is primarily due to several phases in the introduction of the health insurance system (outpatient care since July 2000 and hospital care since 2001). The differences in remuneration rates for inpatient and outpatient personnel caused conflicts that were partially resolved with the introduction of hospital payments through clinical pathways. However, inequities still exist due to the fact that not all the hospitals are paid through clinical pathways and those that are, are using this scheme are using different pathways and varying numbers of them. Since the health care reforms, payment of health personnel tends to be performance-related, although a rather large share of staff are still salaried.

Outpatient care

Under the 1998 Health Insurance Act GPs are paid in accordance with the National Framework Contract. The remuneration of GPs is based mostly on capitation and depends on the number of patients included in a GP list. It also includes additional bonuses such as those for:

- preventive health – a specified amount depending on the age of the patient;
- immunization of individuals included in the Child Health Programme;
- regular medical check-up of individuals in the Maternal Health Programme;
- working in a remote settlement or a settlement with poor infrastructure and other complicated conditions;

- examination of compulsory health-insured individuals from another region reimbursed by the NHIF as fee-for-service.

Table 3.10 presents the capitation rates for different age groups for 2003–2005.

Table 3.10 Per-capita rates for different age groups for 2003–2004 and 2004–2005, BGN

Ages	Monthly per-capita rate, 2003–2004,	Monthly per-capita rate, 2004–2005,
	BGN	BGN
0–17	0.75	0.93
18–64	0.65	0.70
65+	0.96	1.02

Source: National Framework Contract 2003, 2004 (19).

Outpatient specialists are paid on a fee-for-service basis with different rates depending on the service provided. The National Framework Contract of 2005 defines the following fees for specialized outpatient services.

- Payments for a patient’s first visit to a specialist – BGN 10 in 2003 and 2004 and BGN 11.50 in 2005;
- Payments for a second visit regarding the same illness(es) and condition(s) – BGN 4.75 in 2003 and 2004 and BGN 5.50 in 2005;
- Payments for preventive examinations within the Child Health and Maternal Health Programmes;
- Payment per case (clinical pathways: six types) to the provider of specialized outpatient care (health centres, health and dental centres, diagnostics centres) with beds for supervision and treatment for up to 48 hours, if the care satisfies the requirements for the implementation of clinical pathways.

The NHIF also reimburses for physiotherapy, high-specialized services and diagnostics tests with the rates defined in the National Framework Contract.

Payments are transferred from the RHIF to the providers of specialized outpatient health care on a monthly basis upon submission of the corresponding accounting documents.

The NHIF’s remuneration to providers of dental outpatient care is specified in the National Framework Contract, covering only the defined amount included in the basic benefits package.

Inpatient health care

For inpatient care, mechanisms for paying health personnel are dependent on the health institution (private or public). Combinations of various payment mechanisms are generally used and the differences between the types of health institution and their ownership status determine the prevailing mechanism.

In the public inpatient sector health personnel are mostly salaried with additional performance-related bonuses that have been included in the contract with the NHIF as incentive components since 2002. The variable performance-related bonus is the proportion of inpatient facility budget allocated by the NHIF that should be allocated to personnel salaries. In most cases it should not be less than 40% of the budget allocated by the NHIF for clinical pathways, which is the method of paying inpatient providers (35). This arrangement creates explicit conditions for hospital managers to reward personnel, since many of them have historically tended to allocate available resources to hospital restructuring or debts reimbursement, due to constrained financing.

Many hospital managers appeared to be unprepared for this new responsibility, which stirred up discontent among the employees of many hospitals. Besides the lack of managerial capacity, not all hospital departments are paid per case (i.e. according to clinical pathways), thus providing difficulties in defining the salary base. Moreover, as mentioned earlier, hospital managers claim that prices paid by the NHIF for the clinical pathways are unrealistic as they do not represent real hospital costs. Often, hospital managers do not follow the requirements to allocate 40% of income from clinical pathways to staff and instead use these savings to cover hospital costs.

To solve the problem, some hospital authorities have introduced qualitative and quantitative criteria for assessing the individual contributions of doctors and health specialists in performing clinical pathways. A portion of the clinical pathway funds allocated for additional personnel incentives is also allocated to the paraclinic units and in some areas to the administrative structures.

In private hospitals, payment mechanisms are directly negotiable between the employer and the individuals employed under labour contracts for all personnel categories (doctors, health specialists, dentists, pharmacists, management and administration staff, auxiliary personnel). The requirement for compulsory allocation to personnel pay of 40% of the revenue from performance of clinical pathways is also valid for the private hospitals working under contract with the NHIF. In most of the cases, the variable performance-related bonuses contribute to health personnel income in private hospitals.

4 Planning and regulation

This chapter gives an overview of planning and regulation functions, planning and management functions and the various organizational relationships between institutional actors in the health system. Key stakeholder responsibilities for regulation, planning and information dissemination within the health sector are also discussed.

4.1 Regulation

The governmental regulatory functions in the field of health care are laid down in the Constitution and the laws related to health care and local administration. Based on the laws passed by the National Assembly, the Council of Ministers adopts secondary legislation (decrees or ordinances), regulating various aspects of health care (e.g. the Decree on the Definition of a National Health Map).

The Minister of Health has the right to issue ordinances, instructions and orders and therefore regulates certain public relations functions of the national health system (e.g. the Ordinances on the adoption of medical standards). Further, municipal councils can adopt decisions at their sessions and mayors issue orders concerning the operation of the health system in the relevant municipality.

The NHIF has regulatory functions related to the application of the National Framework Contract, which regulates activities and defines the criteria for the implementation of certain activities, such as clinical pathways, methods of prescribing medicines and the development of regulatory standards for the number of formal directions for outpatient care. For the most part, NHIF functions are related to the required consultation with professional organizations.

Fig. 4.1 Overview of government bodies and their health-related regulatory functions

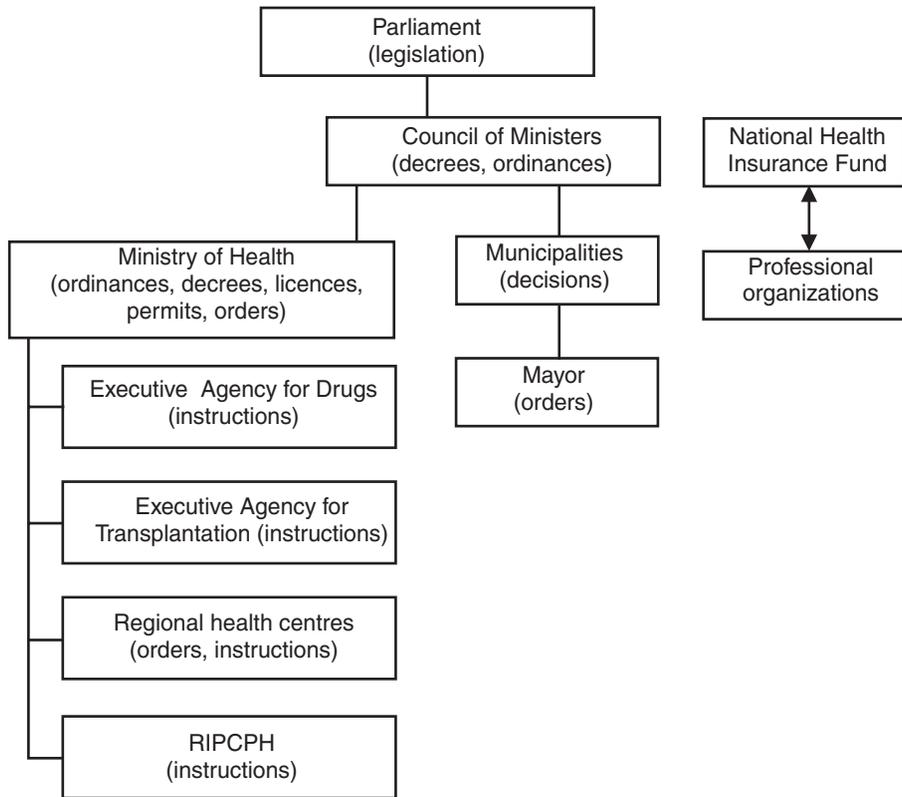


Figure 4.1 shows that regulatory functions are fully centralized on various levels. The municipalities and the NHIF are relatively independent in terms of regulation, but only within the framework of the National Assembly and the Council of Ministers.

4.1.1 Regulation and governance of third-party payers

Third-party payers are present in both the public and private sectors. The 1998 Health Insurance Act and subsequent amendments created the legal basis for the regulation and governance of third-party payers in Bulgaria. In the public sector, the NHIF is the compulsory health insurance body responsible for guaranteeing insured people’s access to health care according to the obligations of the National Framework Contract and by following the guidelines and strategy set out by the Ministry of Health.

The NHIF is a public non-profit-making organization managed by an assembly of representatives, a managing board, a control board and a director. Funding for the NHIF comes via the National Revenue Agency, which is responsible for collecting social insurance contributions. However, the Parliament needs to approve and pass the annual budget submitted by the NHIF before funds can be distributed for the purchasing of services.

VHI is provided by VHICs, which are joint-stock companies registered under the Commercial Act and licensed under the terms and regulations of the 1998 Health Insurance Act. VHI licences are controlled by the FSC, a government commission under the Ministry of Finance, which controls insurance companies, pension companies and VHICs. The commission grants licences for every package of health services, monitors the monthly business indicators of the companies and licenses health insurance premiums and contracts. Any amendment to the licensed packages of health services needs to be coordinated with and approved by the FSC. The minimum capital requirement for filing an application for a licence is BGN 500 000, which needs to be paid in full to a Bulgarian or foreign bank licensed by the Bulgarian National Bank. Within 3 years of getting licensed, a VHIC must increase its capital to at least BGN 2 million.

The FSC regulates the accrual mechanisms for a VHIC reserve fund, the amount of the guarantee capital, and the investment rules for the available assets through secondary regulations. The objective of the FSC's control activity is to ensure the financial provision of the contractual relationship that VHICs have with insured individuals. Where financial difficulties are established jeopardizing the fulfilment of the insurance contracts, the FSC may initiate a procedure for withdrawing the licence of the VHIC concerned. If such a situation occurs, the VHIC would still need to fulfil its commitments to insured individuals, but would be prevented from attracting new customers. A bankruptcy procedure pursuant to the provisions of the Commercial Code would then be initiated on behalf of the company.

There are another three forms of private insurance in Bulgaria: personal deposits in individual supplementary pension accounts; health insurance offered by life insurance companies, among others; and subscribed health care contracts signed with providers for a specific type and volume of health care at set prices. The FSC only regulates the personal deposits in individual supplementary pension accounts and the health insurance offered by life insurance (and other) companies. Personal deposits in individual supplementary pension accounts can be drawn at any time to meet emergency health expenses (36).

Health insurance offered by life insurance (and other) companies provides reimbursement of health costs or cash compensation for temporary disability.

These companies are licensed by the FSC, which also regulates their activity (36).

Subscribers' health care contracts can also be signed with physical and legal persons for the provision of a specific type and volume of health care at specific prices. Such contracts are generally signed by employers for their employees, who can use a preliminary defined package of services in a specified health institution. Payment is made in regular instalments which are identical to the VHI premiums. This type of health insurance is not subject to licensing and control (36).

4.1.2 Regulation and governance of providers

The 1999 Health Establishment Act gives health facilities the status of independent entities with managerial autonomy and also lays out the approved organizational forms for the provision of care according to sectors (16).

Primary care is provided in private practices, group practices and at outpatient departments. The GP is the owner of a private practice and a group practice is owned by its founders. If physicians want to work in the outpatient sector, they are statutorily required to register to provide either primary or outpatient specialized care in either single or group practices; or to be employed by a diagnostic and consultative centre, a medical centre, a dental centre, or a medical and dental centre.

Specialized ambulatory care (private and public) is provided at individual and group practices, health centres, diagnostic and consultative centres and medical and diagnostic or technical laboratories. Individual and group practices are owned by the respective health professionals. Health centres, diagnostic and consultative centres and medical and diagnostic or technical laboratories can be owned by municipalities, cooperative societies, hospitals or other legally recognized health establishments.

Primary and specialized outpatient dental care is provided at individual practices and/or group practices. Individual practices for primary/specialized outpatient dental care are administered and organized by a dentist who can hire other personnel according to his/her needs and dental activities. Group practice for primary/specialized outpatient dental care is carried out by a trade company or a cooperation founded by dentists who can also hire other staff according to their needs and dental activities (16).

All outpatient centres and hospices have to be registered at the Regional Health Centres, which are responsible for keeping a register of all health care facilities in the region.

Hospital care is provided by both private and public hospitals, which need to be registered according to the Commerce Act as either trading corporations or companies. National multi-specialized and specialized hospitals are state-owned; interregional and regional hospitals can be owned either by the State (Ministry of Health and other ministries) or by municipalities; and local area hospitals are owned by municipalities.

Both private and public hospitals are treated equally, regardless of their ownership. All hospitals have corporate management. They have executive directors and a managing board of directors. For public hospitals, state hospitals and municipal hospitals, the managing bodies are appointed by their owner. Owing to the very low level of control, accountability, responsibility and managing capacity, hospitals have historically been managed inefficiently and are thus in debt.

Health care facilities, both private and public, inpatient and outpatient, obtain accreditation from the Ministry of Health. The Accreditation Council at the Ministry of Health drafts standards, regulations and indicators for the accreditation. Accreditation is based on a 1–5 star system and the results are published on the Ministry of Health web site. While health establishments are required to be accredited before entering into a contract with the NHIF, the accreditation system is not linked to differential payments from the NHIF and as a result it loses the potential benefit for rewarding quality.

The SMC is responsible for the planning of health personnel and reports its findings to the Ministry of Education and Science, which is ultimately responsible for planning the training of university and postgraduate students as well as for planning the breakdown of resources for university students. Professional organizations and regional health centres (for specialists) are responsible for ensuring that their health professionals maintain good professional conduct and for providing continuing educational opportunities.

Both physicians and health establishments (private and public) are free to contract with the NHIF and/or VHICs. Health care providers who contract with the NHIF are subject to the National Framework Contract, which is regulated by Article 55 of the 1998 Health Insurance Act. Any physician or health establishment not contracted with the NHIF may provide services to private patients on a paid basis (out-of-pocket payments). If providers deviate from the National Framework Contract, they are either penalized by the NHIF or their contract is terminated. (See Subsection 4.1.3, Section 3.5 and Section 3.6 for more information on the National Framework Contract).

4.1.3 Regulation and governance of the purchasing process

The legal basis for the organizational relations between purchasers and providers can be found in the 1998 Health Insurance Act for both public and private sector activities.

In the public sector the contract model functions as a binding agreement and regulates the relationship between the health institutions and the purchasers of public health care, as well as between the health institution and other persons (when required). According to this model, there are separate individual fixed-term contracts signed between the payer (the NHIF and/or Ministry of Health) and the individual health institutions (private or public).

Regulation of the relationship between purchaser and health care provider for compulsory health insurance is based on the contract model. The director of each RHIF enters into a contract with a health institution (public or private) in the region, provided that they satisfy the requirements of the National Framework Contract. For example, contracts cannot include services that have not been provided or contain less-advantageous provisions than those stipulated for in National Framework Contract. In some cases, the individual contract may provide a limitation on the volume of activities for which the health institution will be reimbursed by the RHIF. Examples of such limitations include the possibility of a capitation on the amount reimbursable for the number of radiographies performed per month.

The National Framework Contract has the strength of a law for all contracting parties and regulates the health care providers, the scope of health services, the mode of payment and prices, the quality of health care indicators as well as the mechanisms of enforcement for the fulfilment of negotiated conditions. The contracts are drafted individually and are amended yearly, when a new National Framework Contract is approved or when the contract in effect is amended.

The NHIF exercises medical and financial control over its contractual members. Immediate medical and financial scrutiny of those who implement the contracts is carried out by officials at the NHIF and the RHIFs by medical auditors. Medical and financial auditors are located in special departments within the NHIF and its regional branches. Financial inspectors control the implementation of the financial part of the contracts, by collecting and compiling accounting documentation and reporting on the contracted health care establishments. Medical and financial control is carried out in the form of planned and surprise inspections in accordance with the National Framework Contract, inspections prompted by suggestions or complaints and upon the termination of a contract with a provider of health care before the contracted term expiry.

The National Framework Contract contains the rules and requirements for health care providers and the activities that should be performed by auditors. The process of medical and financial auditing performed by NHIF inspectors is used as the basis for contracted medical services. While the system is operating, there are problems in building capacity and in training auditors to be effective in their roles.

Fixed-term contracts are also present between the Ministry of Health and hospital directors for state and municipal hospitals, for the financing of publicly-owned health institutions. For further information see Section 3.6.

In the private sector, only integrated and reimbursement models are used between the purchaser (Voluntary Health Insurance Fund) and provider (health care establishments). VHICs are allowed to purchase and provide services and/or individuals can contract directly with the health establishments and receive reimbursement from the insurance companies.

People with VHI can choose either to be reimbursed for the costs of health services or to sign up for subscribed services. If they choose to be reimbursed for the cost of health services, the health insurance company would reimburse the insured person fully or partially for health costs upon the occurrence of insurance events or for a number of treatments in a given calendar year. The reimbursement amount is set in advance in the insurance contract or the contract can specify that the subscriber is to receive a fixed amount connected with treatment expenses. These amounts are paid by the insurer on the basis of documents presented by the insured person for the expenses accrued.

If patients choose to be reimbursed for subscribed services, the VHIC pays contracted health care providers for providing predetermined health services and goods. Subscription contracts are signed between the medical services centres (diagnostic and consultative centres) and natural or legal persons, for providing specified services to the person (individual contract), the members of their families (family contract) or the officers of a certain enterprise (group contracts). The characteristic feature of this practice is the direct connection between patient–client and doctor–provider (of medical care). A similar subscription practice exists in nearly all private diagnostic centres, giving individuals the freedom to choose any medical service provider for care.

In this way VHICs can own their own health institutions and pharmacies and provide care directly, or they can enter into pre-determined contracts with their beneficiaries and either reimburse health institutions directly when care is provided, or reimburse their beneficiaries directly for care provided by health institutions. Patients who purchase out of pocket for their care pay providers directly.

4.2 Planning and health information management

Health-related planning and management are carried out through national health care policy, national and regional health mapping and National Health Programmes, as described here. Parliament is responsible for overseeing the health system and approving national laws, and the Ministry of Health is responsible for setting health-related policy.

The strategic direction of national health care policy is laid out by the Minister of Health in the National Health Strategy, which is written by the Ministry of Health along with national experts, and is approved by the National Assembly. The National Health Strategy usually runs for a period of five years and/or changes with each new Minister of Health.

Planning functions are also carried out through the design of National/Regional Health Maps (RHM). Through this, health establishments, doctors and specialists are planned and distributed by territorial principle on the basis of population needs for accessible and timely health care.

The RHM describes the types, number, activities and distribution of health establishments/doctors/specialists within one region for inpatient, emergency and outpatient care. The RHM is designed based upon available health establishments and their capacities in providing medical care, as well as taking into account the specific geography, existing infrastructure, demographic stratification, social characteristics, priorities, needs of the population and health status in the region.

Based on the RHM, the Minister of Health appoints a national commission to prepare a National Health Map, which, in addition to the RHM, also takes into account geographical borders, the assessment of national priorities, the minimum number of health establishments and the health establishments that are not subject to privatization.

The Ministry of Health is also in charge of implementing population-based health education programmes, anti-epidemic measures, and national preventive and health promotion programmes (Box 4.1). National Health Programmes are developed to help improve the health status and specific needs of the population. Programmes chosen are based on the health status, demographic trends and the available health care resources.

Information systems to collect and monitor data are developing in Bulgaria. Currently, health-related data are collected by the National Centre of Health Informatics, the Ministry of Health and the National Statistical Institute, and

Box. 4.1 National programmes undertaken by the Government since 2000

National programme for prevention of socially significant diseases (2000–2005)
National programme for development of invasive cardiology (2002–2008)
National programme for prevention, treatment and rehabilitation of drug addiction (2001–2005)
National strategy and working programme on preventive cancer screening (2001–2006)
National programme on mental health (2001–2005)
National programme for suicide prevention (2000–2005)
National programme on nephrology, dialysis treatment and kidney transplantation (2000–2005)
National programme on tissue transplantation (2001–2005)
National programme on bonemarrow transplantation (2000–2005)
National programme for prevention, early diagnosis and treatment of tuberculosis (2000–2003)
National programme for prevention of hereditary diseases, predispositions and congenital anomalies (2000–2005)
National programme on restriction of smoking (2002–2006)
National environment and health action plan (2000–2006)
National programme for prevention and control of HIV/AIDS/STIs (2001–2007)
National programme for medical standards (2001–2007)

a new uniform information system is currently under development for the NHIF.

The National Centre of Health Informatics comes under the remit of the Ministry of Health and aims to provide the country with data related to health care and informational support for health care management (12). The Centre collects routine data such as registered cases by disease, prevalence of disability, births, abortions and fertility rates, hospitalization rates by age, data on health establishments and hospital-related indicators by type of facility and data on health professionals and health facilities by region. The Centre is in charge of disseminating that information, which it does through an annual public health statistics publication, published with the Ministry of Health, along with data from the National Statistical Institute. The Centre also provides pre-print preparation of information and prepares special analyses on the problems within the health system. Data from the National Centre of Health Informatics are also submitted to international organizations for comparative health analysis.

The National Statistical Institute was established as early as 1880 as an independent Bulgarian Official Statistical Office. The main functions of the Institute are to collect, process and promulgate statistical data related to all areas

and sectors of the country (2). Data are disseminated in an annual statistical yearbook. Statistics contributed from the National Statistical Institute include economic, demographic and vital statistical data by sex, age, rural/urban location, region and cause, as well as on the number of physicians according to specialty and the number of social health establishments in the country.

The NHIF is currently in the process of developing a uniform information system. With financial support from the World Bank, the system is set to be finalized and introduced by the end of 2007. The goal of this project is to facilitate the ongoing collection and analysis of information, which is necessary for evidence-based decision-making.

5 Physical and human resources

5.1 Physical resources

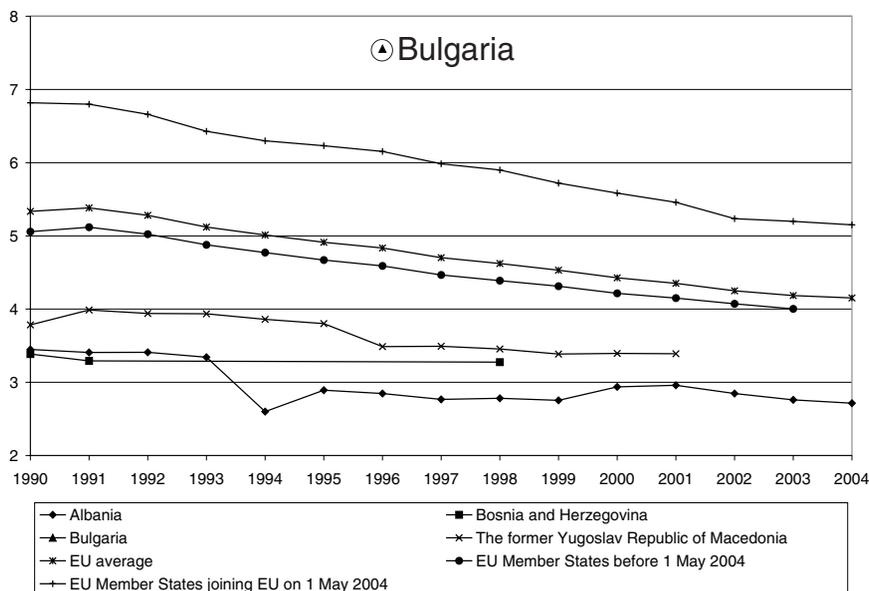
5.1.1 Infrastructure

In 2004 Bulgaria had 306 hospitals (10) with 43 597 beds according to the National Centre Health Informatics (12) and 47 709 beds according to WHO data (9). Numbers of total hospital beds have been gradually decreasing since 1996. The 42% decline in bed numbers during 1996–2004 (10,12) shows that there was a large amount of national effort and political will to follow the reforms (Fig. 5.1, Table 5.1). In 2004, there were 613 total hospital beds per 100 000 population compared to 1996 when the number rose to 1047 per 100 000 population (10). In 2004 the ratio of inhabitants to beds in Bulgaria was lower than the EU10 average of 649 total hospital beds per 100 000 population.

The average length of hospital stay has decreased on average, from 11.5 days in 2000 to 8.3 days in 2004, while the number of patients treated both at multidisciplinary hospitals for active treatment (951 368 vs 1 160 216 patients) and at specialized hospitals for active treatment (99 600 vs 214 933 patients) has increased (12).

When comparing hospital care and other institutions' operating indicators in Bulgaria it should be noted that home care had the longest average length of stay (15.4 days), followed by continuing and long-term treatment (12.8 days), active treatment (7.3 days) and reanimation and intensive care (4.1 days).

Fig. 5.1 Acute care hospital beds per 1000 population in Bulgaria, selected countries and EU averages, 1990–2004



Source: WHO Regional Office for Europe, 2006 (10).

Table 5.1 Physical indicators of hospitals, 2004

Indicators	2004
Population	7 761 049
Number of beds	43 597
Number of beds per 100 000 inhabitants	562
Number of patients admitted	1 473 631
Utilization of hospital capacity (%)	75
Average length of stay (days)	8.3

Sources: National Centre Health Informatics, 2005 (12).

The following targets are currently on the Government agenda in terms of health infrastructure improvements.

- The restructuring of bed space – increasing the amount of post-treatment, continuous treatment and rehabilitation bed space.
- Increased collaboration between health establishments for inpatient and outpatient care, so as to avoid unnecessary hospitalization or hospitalization under complications which might have been avoided.
- Increased collaboration between the hospital network and the social establishments network.

- The introduction of more effective methods of hospital financing, and a continuous increase in hospital care quality.

5.1.2 Capital stock and investment

During the communist era and until the 1990s all hospitals in Bulgaria were severely underfunded as a result of their excessive number and the fact that they were 100% state funded. Instead of closing down ineffective hospitals they were left open and investment was discontinued, leading to old buildings and medical appliances which were not properly maintained. Even with compulsory health care contributions the financing of health facilities was not sufficient to cover the expenditure. The hospital sector appeared to be in need of significant refurbishment and replacement of key diagnostic and therapeutic equipment.

Until 2001, no uniform governmental strategy on capital investment in health system existed. In the period 2002–2005, the government share of capital investment was insignificant, which has negatively affected the potential for a sustainable system and an up-to-date renovation of building facilities. Starting from 2005, the share of Ministry of Health capital investment financing increased by up to 51% of the state budgets allocated for health facilities. In addition to the state subsidies there is municipal funding, in accordance with the State Budget Act, used for the acquisition of long-term assets, capital repairs and restructuring of health facilities, and information technology (IT).

Other sources of health facilities investment are grant programmes (PHARE and the World Bank), which amounted to €25 million during 2001–2005 and was allocated for equipment procurement and establishing GP practices. There has also been increasing entrepreneurial involvement with projects related to the construction of hospital treatment institutions in recent years: for instance, the “Doverie” Fund invested US\$ 7 million in the construction of a new hospital in 2005, as did the Tokuda Corporation, among others.

Capital investment might be made by the owner of a health facility with resources borrowed from the European Investment Bank and other banks with a portfolio in the health sector. Banks issue mainly consumer loans with collaterals of up to 200% of the loan value. State guarantee is usually requested before a loan can be issued.

The Ministry of Health prepared a National Health Map of the country, identifying the distribution of infrastructure such as the number of outpatient and inpatient health care facilities, territorial coverage of health facilities and the necessary number of specialists, in accordance with the health needs of the population.

There are four main categories of health facility in Bulgaria: hospitals, dispensaries, outpatient health facilities and sanatoria, emergency care centres, hospices, homes for children's social and medical care, hygiene and epidemiological inspectorates, and national and regional health centres (Table 5.2).

Hospital care in Bulgaria is provided by public and private health establishments. All hospitals have to be registered (in accordance with the Commerce Act) as trading companies. The registration of public hospitals provides them with the administrative and financial autonomy necessary to sign contracts with health insurance organizations, as well as for more rational management. Their status also allows them to operate diagnostic consultative or medical centres and hospices as subsidiary firms. In order to sign a contract with the NHIF, a hospital should be accredited according to the rules of accreditation (for more information see Section 4.1).

There are three main types of hospital in Bulgaria: hospitals for active treatments, hospitals for further treatment and continuous treatment, and hospitals for rehabilitation. Hospitals for active treatment are designed for patients with acute diseases, traumas, aggravated chronic diseases and for those conditions requiring surgical treatment in hospital as well patients requiring maternity care and cosmetic surgery (16). Hospitals can be multidisciplinary or specialized. A hospital is considered to be multidisciplinary if it covers at least four medical disciplines organized in departments or clinics (16).

Hospitals for further treatment and continuous treatment are for patients with chronic diseases, patients needing long-term care and for those suffering from mental health conditions.

Hospitals for rehabilitation are designed for patients needing physical therapy, motor and psychic rehabilitation including balneological, climatological and thalasso therapies.

There are five main types of outpatient health centre in Bulgaria: medical centres (MC), diagnostic and consultative centres (DCC), dental centres (DC), medical and dental centres (MDC) and independent medical diagnostic laboratories (IMDL).

MCs provide specialized outpatient care with a team of no fewer than three doctors offering different specialties in medical treatment and are managed by a qualified physician. An MC can be a single practice (GP or dentist) or a group practice. Every doctor is registered at the practice in which he is working (single practice, group practice, laboratory, MC, DC, DCC, etc.). Their practices can be physically separated, or there can be one contract for group practices, laboratories or the kind of "virtual group practices", for example, where many

Table 5.2 Health care facilities with number of beds, 2002–2005

Facilities	2002		2003		2004		2005	
	Number	Beds	Number	Beds	Number	Beds	Number	Beds
Hospitals	251	46 929	249	45 070	257	43 597	262	45 537
Multidisciplinary hospitals	140	33 512	135	32 404	140	31 337	141	32 517
Specialized hospitals	111	13 417	114	12 666	117	12 260	121	13 020
Dispensaries	49	4 101	49	4 101	46	4 112	46	4 089
Pulmonary	13	792	13	787	12	787	12	787
Dermato-venerological	12	223	12	218	11	208	10	203
Oncological	12	1 512	12	1 572	11	1 593	12	1 575
Psychiatric	12	1 574	12	1 524	12	1 524	12	1 524
Outpatient health establishments	1 423	381	1 455	523	1 489	669	1 554	819
Diagnostic and consulting centres	106	142	103	133	107	204	105	268
Medical centres	418	212	456	370	454	440	495	518
Dental centres	70	2	60	2	56	4	53	4
Medical dental centres	45	25	43	18	44	21	47	29
Medical diagnostic and medical technical laboratories	783	–	793	–	828	–	854	–
Sanatoria establishments	2	410	3	910	2	740	2	740
Other health establishments	165	4 206	163	4 250	165	4 345	160	4 332
Emergency care centres	28	–	28	–	28	–	28	–
Hospices	43	169	38	178	37	279	33	287
Homes for social and medical care for children	32	4 037	32	4 072	32	4 066	32	4 045
Hygiene and epidemiological inspectorates	28	–	28	–	28	–	28	–
National centres without beds	6	–	6	–	5	–	5	–
Regional health centres	28	–	28	–	28	–	28	–
Dispensaries without beds	–	–	–	–	3	–	2	–

Source: National Statistical Institute, 2006 (2).

doctors consolidate their medical activities in order to issue one claim from all of them.

DCCs provide specialized outpatient care consisting of a team of not less than 10 physicians from various specialties. The centre must contain at least a medical diagnostic laboratory and the possibility of taking X-rays. These centres are managed by a physician who is also qualified in health and medical information management.

DCs provide specialized outpatient dental care with a team of no fewer than three dentists offering different specialties in dental treatment. The DC is managed by a dentist with the adequate qualifications.

MDCs provide specialized outpatient medical and dental care with a team of no fewer than three physicians and/or dentists from various specialties for medical and dental treatment. The MDC is managed by a qualified physician or dentist.

IMDLs are where at least one physician or dentist with the assistance of other specialists carries out specific technical activities and elaborates on special medical auxiliary devices prescribed by a doctor or a dentist. The independent medical technical laboratory is managed by a doctor, dentist or other specialist according to the specific profile of the laboratory. There are also hospital laboratories (treated as a part of the clinical pathway) or highly-specialized diagnostic activities in hospitals, which carry out similar functions.

There are two sanatoria establishments in Bulgaria and 160 other establishments. Other establishments consist of the regional emergency services and hygiene and epidemiological inspectorates, hospices, social health care establishments for children, regional health centres and regional health centres and dispensaries without beds.

The development of national infrastructure varies between regions. In mountainous and border regions, where mobility is rather time-consuming, national infrastructure is underdeveloped; such terrain complicates the reconstruction of the hospital network and dispels any goodwill to close and restructure inefficient treatment institutions. Some medical equipment is also considered obsolete in general terms (around three quarters of the medical equipment is over 20 years old).

5.1.3 Information technology

There have been advances in overall investment for the IT sector in Bulgaria as well as for IT in the health system. In 2005, information and communication technology expenditure accounted for 3.77% of GDP and there were 59 personal computers (PCs) per 1000 inhabitants in 2004, compared to 47 in 2001 (4).

Use of the Internet is also increasing. A recent survey conducted by the Alpha Research Agency found that 23% of adult Bulgarians used the Internet in 2004 (37).

IT enjoys an ever-expanding application in outpatient care medical centres and in hospitals. Thanks to a financial donation from the World Bank, every GP now has a PC workstation and all PCs report in a digitalized format. In 2003, the Ministry of Health together with the Ministry of Finance and the NHIF countersigned the so-called “road map” setting forth the particulars of the coming incorporation of a diagnosis-related group (DRG) system within the reporting processes of hospitals. According to the “road map”, and with the support of USAID and 3M Health Information Systems, a pilot project with 43 hospital beneficiaries was developed and implemented. 2004 marked the second year in which the relevant data necessary to calculate relative weights were collected. The National Centre for Health Informatics is also currently working on a project related to the introduction of uniform information standards within the health system under which in 2004–2005 all regional health care centres were updated with modern IT equipment.

The Health Card is one of the key technologies currently being developed and introduced in Bulgaria for health sector optimization, more efficient transactions between the health care institutions, more secure, flexible and transparent exchange of information, standardization of services and activities, and ensuring future interoperability with other European countries and health systems.

At the time of writing, there is no exact information about the dates for the launch of the system.

5.1.4 Medical equipment, devices and aids

There is no mechanism for technology assessment or for controlling the introduction of new technology in the health sector. At present decisions on the purchase of new equipment are left to the municipalities and other owners of health facilities.

5.1.5 Pharmaceuticals

The BDA, which was established in 2000 according to an amendment of the 1995 Pharmaceuticals and Human Medicine Pharmacies Act, is responsible for registering and licensing medical products as well as for supervising the quality, efficacy and safety of such products. According to an amendment in late 2002, the Director of the BDA has the final authority to grant marketing authorization for medical products.

The BDA regulates clinical trials and all pharmaceutical-related advertising in the media. Once advertising permission is received, over-the-counter (OTC) products can be advertised in all media, while prescription products can only be advertised to health professionals. Advertisements must include the brand name of the product as well as information on correct usage and side-effects, among other things.

The Special Drug Commission at the Ministry of Health is responsible for determining the legal classification of drugs. Pharmaceutical drugs are classified as being either OTC or prescription drugs. In 2003, 63 new drugs were authorized in Bulgaria; 79% were prescription drugs and 21% were OTC drugs (38). The Ministry of Health is responsible for monitoring the packaging and labelling requirements, while the BDA is responsible for approving the leaflet included in the package, as well as regulating the packaging information such as recycling, usage of radioactive ingredients and NHIF stickers.

Since the mid-1990s the Bulgarian pharmaceutical market has been experiencing significant challenges as part of a process of harmonization with EU regulations.

With the introduction of VAT on drugs and in order to meet the Good Manufacturing Practice standards as defined by the EU and WHO, the Bulgarian pharmaceutical companies have had to invest considerable sums. More regulations on defence of intellectual property rights in the pharmaceutical industry were introduced. Introduction of patent rights was followed by the EU Directive 2001/83/EC of the Community Code that envisaged that the information on the results of pre-clinical and clinical trials of a drug could not be used by companies other than the owner of the drug without the owner's permission. Such information would become available to the public six years after the registration of a drug. Owing to these requirements Bulgarian manufacturers which produce mainly generic drugs would only be able to register their products after a delay of several years, resulting in loss of market share (18). However, the implementation of the new regulations will reduce the process of registration of new generic drugs to two years; at the time of writing, registration takes nearly three years.

Private pharmacies must be licensed by the Council for Pharmaceutical Affairs at the Ministry of Health; licences are only granted to the pharmacist as manager of the pharmacy. However, there are certain chains of private pharmacies which belong to joint-stock companies that include pharmaceutical manufacturers and wholesalers, which is against the law in Bulgaria.

Pricing

The Drug Pricing Committee at the Ministry of Health is responsible for the pricing of medicines, including medicines for hospital use, generics and OTC products, reimbursed and non-reimbursed pharmaceuticals.

The Ministry of Health deals directly with pharmaceutical companies or their representatives on setting the maximum selling price. Foreign manufacturers have to justify their price, along with presenting evidence to the committee. Prices are published annually in the State Gazette, along with the maximum retail price that can be charged for individual products.

Prices fall into three pricing categories which differ by the level of pricing control. The first category includes prices that can change without an agreement from the Drug Pricing Committee; the second category includes drugs for which the Drug Pricing Committee must be consulted before a price can be changed; and the third price category consists of drugs whose prices cannot be higher than the retail prices found in nine European countries (Austria, Hungary, Poland, Portugal, Romania, Slovakia, Spain, the Czech Republic and the Russian Federation) multiplied by a certain percentage applied for different groups of drugs. Drugs in the third category include all drugs that are fully and/or partially covered by the NHIF.

The wholesale commercial percentage surcharge is established at either 10%, 9% or 7%, depending on the price. When the price is less than BGN 7, the statutory surcharge is 10% (category A). If the price range is between BGN 7 and BGN 30 the surcharge percentage is 9% (category B) and for price ranges over BGN 30 the surcharge percentage is 7% (category C) (34).

The mark-up by retailers depends on the price category of the product (i.e. if the manufacturer's price is high, then retail mark-up will be low as prices cannot be higher than the maximum retail price). The retail mark-up is subject to the same price ranges as those of the wholesale surcharge. The surcharge for prices in category A amounts to 28% of the lowest producer price already established; for pharmaceuticals in category B there is a 25% surcharge and the surcharge for pharmaceuticals in category C is 20%, but the surcharge cannot exceed BGN 30 for each pharmaceutical product. VAT is included as part of the maximum retail price calculations (39).

Reimbursement

In 2004, the Ministry of Health introduced a Positive Drug List (PDL) for drugs reimbursed by the NHIF. The PDL consists of products grouped under their anatomical-therapeutic-chemical (ATC) code. These products cover socially important and recognized groups of diseases and are selected on the basis of efficacy, safety and pharmaco-economic indicators. Drugs on the PDL

have to include drugs covering major diseases of social significance such as cancer, cardiovascular diseases, neurological disorder, psychiatric conditions, metabolic disorders, allergies and respiratory diseases. The PDL Committee at the Ministry of Health only includes drug applications, which do not have cheaper and sufficiently good alternatives. The PDL and all corresponding specific regulations on drug reimbursement are aimed at decreasing the share of original innovative products whenever generics are available and guaranteeing drug reimbursement through public funds.

The total number of products included in the PDL for 2005 consisted of 2813 trade names and 771 international non-proprietary names (INNs), compared to 2477 trade names and 667 INNs in 2004. The PDL includes both the INNs and the trade names by dosage forms. All drugs with identical INNs are considered to be equally effective, differing only on price. Studies comparing the cost-effectiveness of certain medications are carried out for the drugs with different active substances. There are two major lists of drugs (Part A and Part B) that make up the PDL.

- Part A includes INNs only, plus dosage form and strength with pharmacotherapeutic and cost advantages over competitors.
- Part B includes all multi-source brands containing Part A active ingredients along with marketing authorization holders.

On this basis, the Minister of Health specifies in an ordinance a list of diseases for which medicines for outpatient treatment are to be fully or partially payable by the NHIF and other financing sources. A pharmaceutical product can only be included in the NHIF reimbursement list after it is listed in the PDL. Changes to the reimbursement list are made on a monthly basis.

Drugs on the NHIF Reimbursement List are reimbursed based on reference pricing, which is based on the maximum value per unit of active substance. This value is based on the INN under which the drug is classified and its dosage form, and it is calculated based on the lower figure of either the value per unit of active substance according to the previous National Framework Contract negotiation and/or the average arithmetic value per unit of active substance covered by public health insurance funds in Greece, Hungary, Latvia, Poland, Romania, Slovakia, Slovenia, and the Czech Republic (39). The maximum value per unit of active substance represents the reference price for all drugs of the same group. The reference value for each drug cannot exceed the NHIF limited budget for drugs.

The determination of whether or not a drug will be fully or partially reimbursed by the NHIF is based on the classification category of the drug on the reimbursement list (one of three possible categories). The first category includes drugs for diseases that have a low incidence and morbidity but lead to

high mortality and disability; the second category includes drugs for diseases with high incidence and a chronic nature; and the third category includes drugs for diseases not included in the other two categories. The NHIF reimburses up to 100% for categories one and two and up to 75% for category three (39).

Based on the reimbursement list adopted by the NHIF, the NHIF develops negotiation criteria for the supply of medicines and a methodology for specifying their payment. Before the NHIF can enter into negotiations with manufactures and/or wholesalers, the following criteria have to be met: (1) the drug must be included either in Part A or Part B of the PDL; (2) the INN must be included in a PDL of at least three of the following eight countries: Greece, Hungary, Latvia, Poland, Romania, Slovakia, Slovenia and the Czech Republic; (3) there must be agreement between the dosage and indications of the drug and the list of diseases for which the NHIF provides reimbursement; and (4) the delivery and quantity of the drug is to be intended for home treatment.

The NHIF and other public financing sources cover approximately 60% of the pharmaceutical market expenditures and patients cover approximately the other 40% through out-of-pocket payments.

5.2 Human resources

5.2.1 Trends in health care personnel

Table 5.3. shows the detailed structure of human resource parameters and their dynamics over time. Health care human resources in Bulgaria are relatively sufficient and there is a growing trend in the availability of university-educated personnel within the health system. However, variations between different health care professions can be seen (Table 5.3). The number of GPs, nurses and pharmacists per 100 000 population is low by European standards, while Bulgaria has one of the highest number of dentists per 100 000 population in Europe (Fig. 5.2, Fig. 5.3, Fig. 5.4, Fig. 5.5 and Fig. 5.8).

As shown in Table 5.3, the number of specialists is still high compared to GPs, despite establishing new training courses and specializations in family medicine. Since the 1980s the number of GPs has increased steadily, which is probably related to the increasing number of medical graduates and expected remunerations promised by the reforms. The average increase, however, was reduced in 1996–2001, as shown in Table 5.3 and Fig. 5.2. This decrease is attributed to the underfinancing of increased GP responsibilities compared to district physicians working in polyclinics, leading to dissatisfaction among

Table 5.3 Medical personnel per 100 000 population, 1980–2004

	1980	1985	1990	1995	2000	2004
Physicians	245.96	286.47	316.96	345.81	336.91	352.43
General practitioners (PP)	45.93	64.55	75.71	80.41	66.72	68.90
Dentists (PP)	54.61	64.13	67.95	65.20	82.96	83.42
Pharmacists (PP)	41.17	46.98	48.56	22.39	12.48	–
Nurses (PP)	512.88	567.09	598.50	607.12	385.29	382.58
Midwives (PP)	89.12	87.33	83.91	79.13	50.56	43.91
Physicians graduated	15.32	16.58	–	–	–	–
Nurses graduated	54.78	13.47	–	–	–	–
Midwives graduated	–	1.40	–	–	–	–
Pharmacists graduated	–	1.55	–	–	–	–
Dentists graduated	–	2.58	–	–	–	–

Source: WHO Regional Office for Europe, 2006 (10).

Note: PP: physical persons.

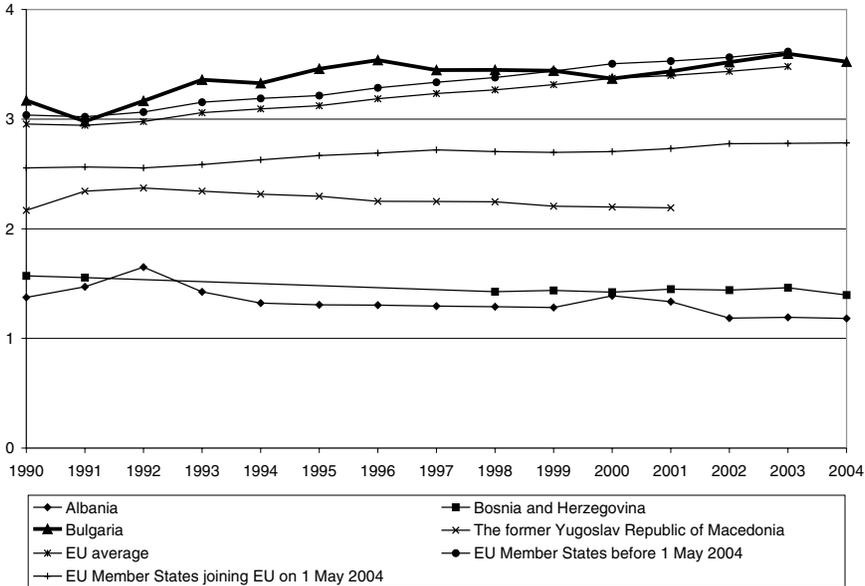
doctors and the development of discreditable practices (39). Moreover, in the early 1990s, some restrictions were placed upon the number of medical students to be admitted at the medical universities and colleges, and this influenced the number of GPs within few years.

The same trend has been noticed with the number of nurses, which was steadily increasing during the reforms until 1996, but then decreased sharply until 2002 and dropped almost twice from the highest level of 614.21 nurses per 100 000 inhabitants in 1993 to the lowest of 362.29 nurses per 100 000 inhabitants in 2002 (Fig. 5.3). Most of them were seeking better jobs abroad due to the low profile of the profession and its remuneration. In 2004 the number of nurses in Bulgaria was as low as in Romania (400.64 nurses per 100 000 inhabitants in Romania and 382.58 per 100 000 inhabitants in Bulgaria), less than the EU10 average and more than twice as low as the EU average (Fig. 5.3).

Figure 5.4 suggests that in 2004 Bulgaria was in the mid-range of WHO European Region countries in terms of number of GPs, but with one of the lowest numbers of nurses in the Region.

Bulgaria has been, and still is, the country with the highest number of dentists in Europe. The number has been growing steadily over the decades

Fig 5.2 Number of general practitioners (PP) per 1000 population in Bulgaria, selected countries and averages, 1990–2004

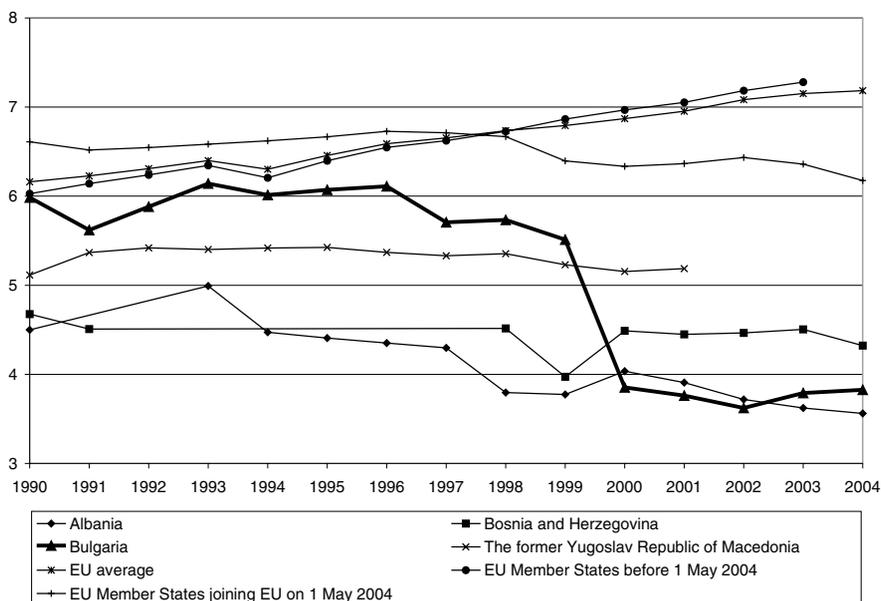


Source: WHO Regional Office for Europe, 2006 (10).

and reached its highest number of 83.42 per 10 000 inhabitants in 2004 with some decline in 1996–1999 (Fig. 5.5). Figure 5.5 shows that in 2004 the number of Bulgarian dentists twice exceeded the EU10 average (43.19 dentists per 100 000 inhabitants) and was 25% higher than the EU average (62.64 dentists per 100 000 inhabitants) (10). Such a high number of dentists is attributed to increased number of training courses in the 1970s and 1980s and increased profits for dentists and lack of pricing regulations for dental services in the 1990s (for more information on dentists see Section 6.12).

Until 1990 the number of pharmacists was growing steadily, exceeding the EU10 average. However, this trend has changed radically, with the numbers decreasing from a high of 48.5 pharmacists per 10 000 in 1990 to 12.4 pharmacists per 10 000 in 2000, positioning Bulgaria as the country with one of the lowest densities of pharmacists in the EU (see Fig. 5.6 for EU averages). Part of the reason for a decrease in the number of pharmacists is the fact that a large proportion of the profession is employed by foreign private pharmaceutical companies, which offer higher wages in the country. The number of pharmacists is expected to increase in future with the establishment of a new Faculty of Pharmacy at the University of Plovdiv.

Fig 5.3 Number of nurses (PP) per 1000 population in Bulgaria, selected countries and averages, 1990–2004

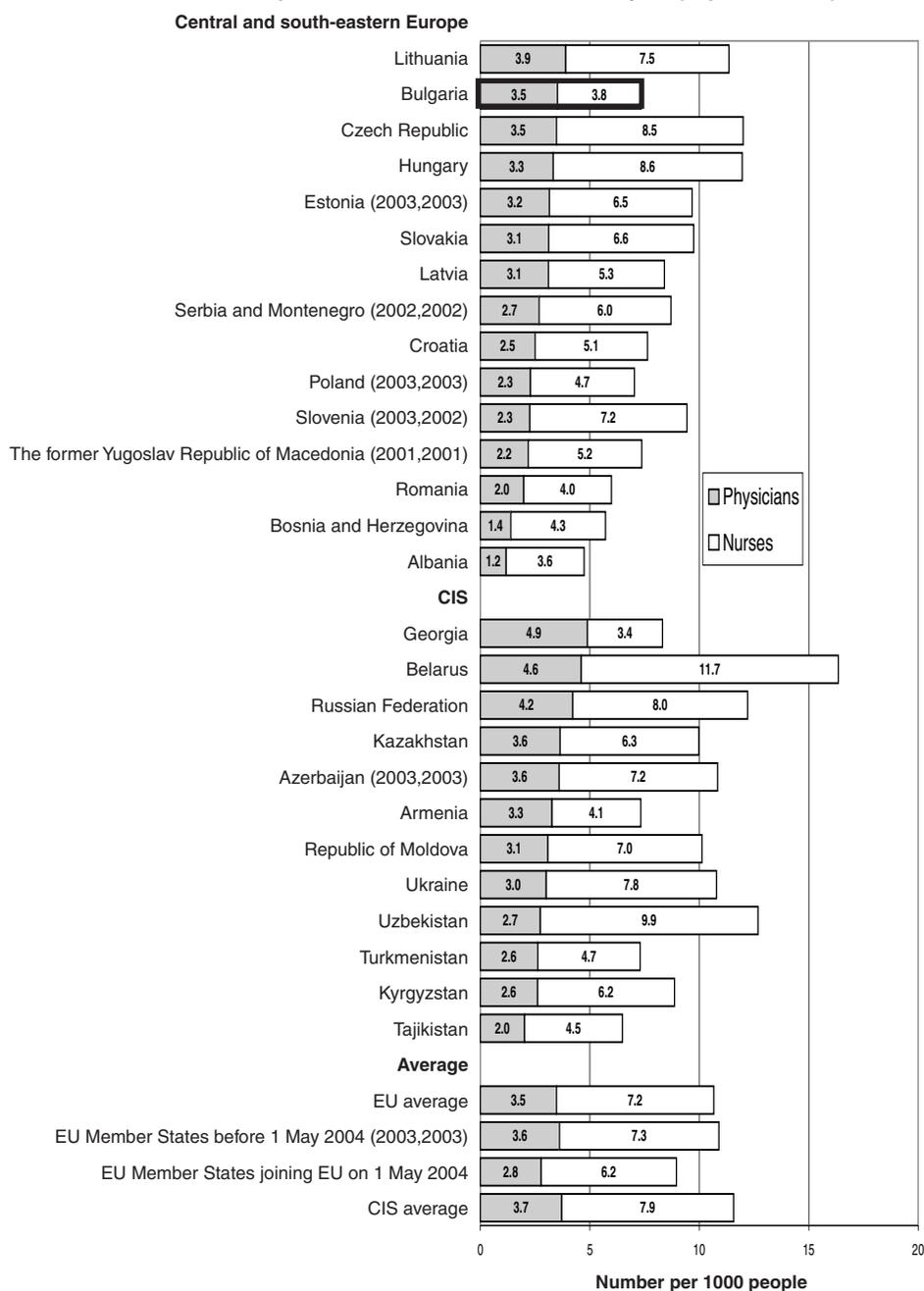


Source: WHO Regional Office for Europe, 2006 (10).

5.2.2 Planning of health care personnel

The Supreme Medical Council (SMC), a consulting body within the Ministry of Health, is responsible for the planning of health care personnel. The SMC reports to the Ministry of Education and Science, which is responsible for planning the training of university and postgraduate students as well as for planning financial resources for university students. However, no clear criteria for the planning of personnel exist in Bulgaria and this fact has already affected the system itself and led to the specialization trend that has been observed. Under a USAID project in 2003–2004, the Ministry of Health proposed a system of information collection and analysis and health care staff planning, both on a national and regional level. Having adopted the 2004 Health Act and with reference to the specific requirements for Bulgaria’s accession to the EU, the Ministry of Health is starting to develop and keep a unified registry of health personnel, professional organizations and medical universities, to introduce a system for continuing medical education for health professionals.

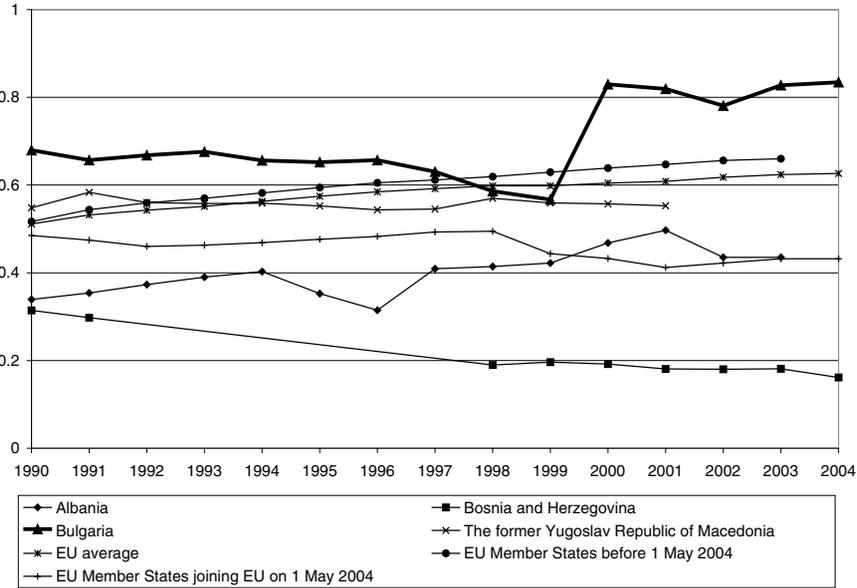
Fig. 5.4 Number of physicians and nurses per 1000 people in central and south-eastern Europe and CIS, 2004 or latest available year (in parentheses)



Source: WHO Regional Office for Europe, 2006 (10).

Notes: CIS: Commonwealth of Independent States; EU: European Union.

Fig 5.5 Number of dentists (PP) per 1000 population in Bulgaria, selected countries and averages, 1990–2004



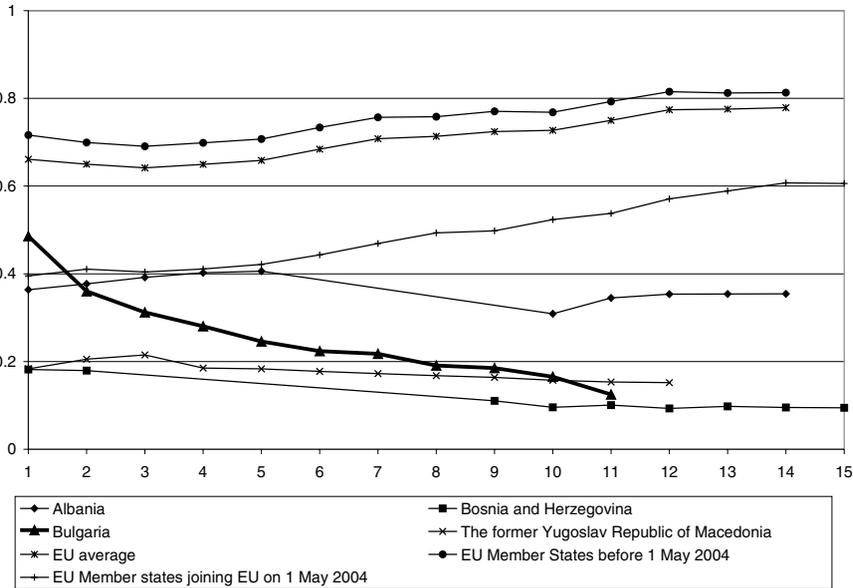
Source: WHO Regional Office for Europe, 2006 (10).

5.2.3 Training of health care personnel

Doctors are trained at five medical universities in Plovdiv, Sofia and Varna and medical schools in Pleven and Stara Zagora, which were originally part of the National Academy of Medicine, but since 1991 function independently under both the Ministry of Health and the Ministry of Education and Science.

The Medical University in Sofia has four faculties: medicine, dentistry, pharmacy and public health. Plovdiv has two faculties: medicine and dentistry. Varna has two faculties: medicine and public health. The other two schools in Pleven and Stara Zagora have faculties of medicine only. Undergraduate medical education for doctors lasts six years and includes five years of theoretical training and one year of practice, leading up to five state exams during the final year. The curriculum was recently reorganized to include 90 hours of teaching in family medicine. After their residence and postgraduate qualification, doctors register their medical qualifications with the Ministry of Health and obtain a licence to practise their specialty in the Centre for Postgraduate Training at the Medical University of Sofia. The SMC of Bulgaria has developed new curricula for postgraduate specialization, undertaken in a hospital approved by the Ministry of Health.

Fig. 5.6 Number of pharmacists (PP) per 1000 population in Bulgaria, selected countries and averages, 1990–2004



Source: WHO Regional Office for Europe, 2006 (10).

There are 16 basic specialties for medicine in Bulgaria, each with an average duration of three to four years (depending on the specialty and workplace of the trainees). Each university is responsible for admissions and the organization of specializations, but all trainees sit a final standardized examination in Sofia before they are allowed to practise their specialty.

Doctors continue their training through postgraduate courses or continuing education and qualification according to the Regulation on Postgraduate Studies. Postgraduate courses are organized by the Ministry of Health and the Bulgarian Medical Association, and training is conducted by the experts from research and development societies and medical universities. A system of credits is used to assess the medical specialists’ performance during studies. However, this system still requires more work and improvement of the assessment criteria.

There are 5-year master’s programmes at the dentistry faculties at the Plovdiv and Sofia Medical Universities. Further education for dentists can be obtained at medical universities and through the Union for Dentists in Bulgaria. Criteria and professional standards are developed by the SMC.

All paramedical personnel (nurses, midwives, laboratory and X-ray technicians, physiotherapists, etc.) receive training at a selection of 14 medical colleges. Their training programmes and curricula were updated during the implementation of the EU-funded PHARE Project on Development of Paramedical Education in Bulgaria, in collaboration with experts from France and Belgium. Within the same project a Bachelor's programme in health care management for nurses and for paramedical specialists was developed. This programme is offered at three university centres: in Sofia since 1995, Pleven since 1996 and Plovdiv since 1997.

The recognition of nursing as a profession has been a fairly recent phenomenon for Bulgaria. Only recently the nurses were given a choice to obtain a university degree. Those with a Bachelor's degree in nursing can undertake a Master's degree in nursing. Postgraduate education is available through the Nursing Association but is not compulsory.

Pharmacists are trained at the Medical University of Sofia's faculty of pharmacy. The duration of the course is five years and it is organized according to three levels. The first level is aimed at providing fundamental knowledge for the profession. The second level is oriented towards knowledge and skills specific for the pharmaceutical profession. Students can major in either General or Industrial Pharmacy, the choice being made after the sixth semester. The third level takes place in the tenth semester in pharmacies and in drug stores, pharmaceutical firms and/or pharmaceutical laboratories for drug control which are established as training centres. Graduation occurs after successfully passing the state examination or defending a Master's thesis. Pharmacy graduates are conferred a Master's degree and are legally allowed to practise as a pharmacist.

There is an official programme for postgraduate education in informatics and health care management as a medical specialization offered for managers and directors of health care facilities before applying for such positions.

5.2.4 Registration/licensing

Upon graduation health professionals are required by law to become members of their respective professional organizations. The registration of health professionals is performed at the regional health centres of the Ministry of Health.

5.2.5 Doctors' career paths

Upon the completion of their education, doctors have several possible career paths.

- To start working as GPs and to specialize in general practice.
- To begin a specialization course in one of the fields stipulated by the ordinance on specialization courses for a postgraduate degree, in a government-paid scheme or an individually paid scheme. After becoming specialists, doctors can start working for a health facility. Based on competitive selections announced by medical universities, they can become associate professors at the relevant medical school.
- To work for the central or local administration after a competition under the Civil Servants' Act.
- To work in the pharmaceutical sector to become medical representatives of the respective companies.
- To apply for continuation of their postgraduate training in European or US universities.

Future developments in human resources planning are focused on enhancing the administrative capacity; ensuring correspondence of professional training and national human resource requirements; ensuring improvements of health professionals' qualifications; creating conditions for mutual experience exchange and fostering the use of a uniform and updated database where possible.

6 Provision of services

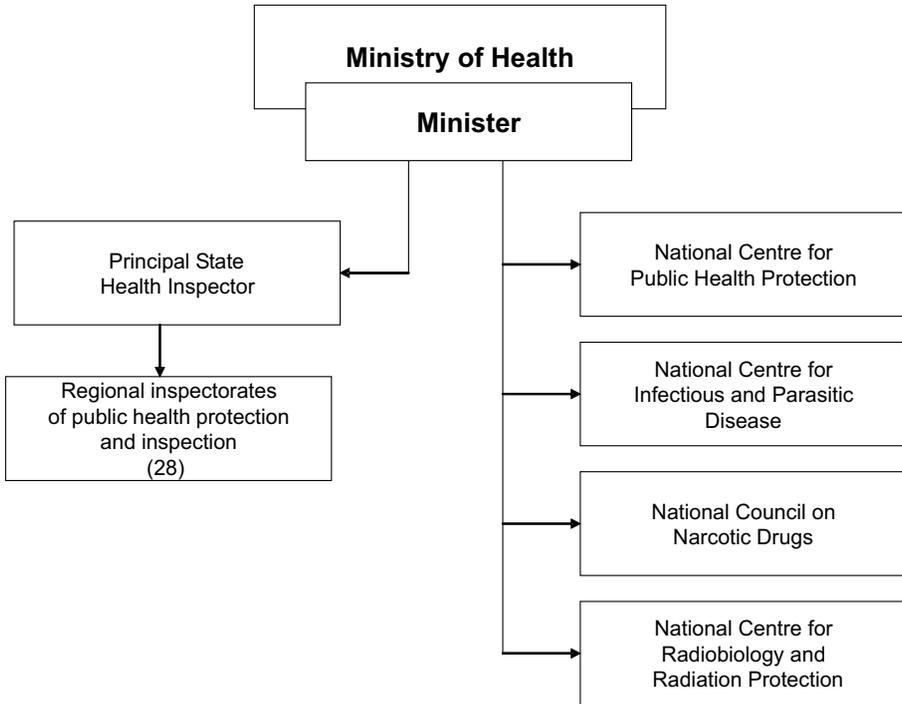
6.1 Public health

Public health protection and inspection in Bulgaria is centralized at the state level and regulated by the Ministry of Health. The Principal State Health Inspector of the Ministry of Health functions as a coordinator and methodological leader for provision of public health services within health care and in other sectors (parallel systems) such as defence, interior, transport and justice.

The network of 28 RIPHPIs covers the entire country, being a centrally managed, well-structured network financed by the Ministry of Health. Public health protection and inspection is also supported by three national centres of the Ministry of Health: the National Centre for Public Health Protection, the National Centre for Infectious and Parasitic Diseases and the National Council on Narcotics Drugs, whose responsibilities and functions are regulated by the 2004 Health Act. The National Centre for Radiobiology and Radiation Protection also belongs to this network of inspectorates (Fig. 6.1).

The principal functions of public health protection and inspection are detailed here:

- state sanitary control (public places, products, food and drinking water);
- anti-epidemic control, including the monitoring of infectious and parasitic diseases;
- health promotion and integrated prevention;
- laboratory testing of environmental factors and the assessment of their impact on population;
- inspecting noise in urbanized areas and public places;
- radiology and radiation protection;

Fig. 6.1 Institutional structure of public health protection and inspection

- providing consultations and expertise to state, municipal and other bodies on public health protection;
- elaborating and implementing national and regional programmes for public health protection;
- providing postgraduate training for institutions and NGOs on public health protection.

RIPHPIs, being relatively autonomous and centralized, are utilizing a multisectoral and multilevel approach in their work, developing effective collaboration with other sectors' institutions at national, regional and municipal levels, such as the Ministry of Environment and Water and its local bodies, the regional inspectorates for environmental protection and ecology issues, the Ministry of Regional Development and Public Works, Labour and Social Policy, Youth and Sport, Education and Science, Agriculture, the Interior, the State Agency for Child Protection, and municipal councils and local administrations. The public health network involves also NGOs such as the Family Planning Association, Anti-AIDS, the Bulgarian School Health Association, Roma community organizations and others.

The national health promotion strategy focuses on screening programmes that include regular medical check-ups of children and students up to the age of 18 and adults over the age of 65 conducted by GPs or school medical officers. Screening programmes are usually implemented in dispensaries, which are vertically integrated according to diseases (venereal and skin, mental, oncological and respiratory diseases).

Immunization is compulsory for children and young adults under the age of 18 as well as for high-risk individuals. Immunization is carried out through national immunization programmes (the “immunization calendar”) funded by the State and provided by GPs or school medical officers (for further information see Section 1.5).

6.2 Patient pathways

Every clinical pathway represents a series of predefined and targeted actions (diagnosis, admission, acute care, surgery, recovery, etc.) applied to patients with certain conditions in a health facility in order to ensure an expedient, effective and efficient treatment. All these actions are arranged in a specific sequence in time and are performed by the members of the medical team responsible – doctors, nurses, laboratory technicians, psychologists and other supporting staff (33).

Clinical pathways were introduced in 2001 as part of the National Framework Contract and the principle of paying for hospital services by NHIF. Hospitals contracted with the NHIF can receive payment for any individual who has received treatment along a clinical pathway and for contracted and completed medical and diagnostic services based on clinical pathways. Payment is based on a single flat rate per diagnosis. In accordance with national data in 2001 there were 158 diagnoses grouped in 30 clinical pathways. The number of clinical pathways increased from 40 in 2002 to 120 in 2005, covering 1500 diagnoses (40). More information on reimbursement for clinical pathways is presented in Subsection 3.6.1.

Development and introduction of clinical pathways in Bulgaria were aimed at supporting clinical management as well as resource management, clinical audit as well as financial management and at improving the continuity and coordination of care across different disciplines and sectors. Clinical pathways could be viewed as algorithms, and an example of the decisions to be made and the care to be provided for a given patient with a stomach ulcer is presented in flow chart format in Fig. 6.2 and explored below.

Fig. 6.2 Stomach ulcer patient pathway

Pre-diagnosis ↓	<ul style="list-style-type: none"> • Visit to a GP • Assessment of symptoms • Laboratory medical test
Diagnosis ↓	<ul style="list-style-type: none"> • Further medical tests • Specialist/inpatient referral
Treatment plan ↓	<ul style="list-style-type: none"> • Decision on treatment method: surgical or conservative treatment, based on risk factors and severity of case
Treatment ↓	<ul style="list-style-type: none"> • Delivery of treatment • Transfer decision: same/different ward and/or another medical establishment • Preparation of medical report on recommendations
Post-treatment ↓	<ul style="list-style-type: none"> • Primary rehabilitation • Decision on next stage for patient: hospital discharge and/or continuing with treatment
Rehabilitation	<ul style="list-style-type: none"> • Ongoing rehabilitation and treatment under the GP's control • Relatives and family members informed about patient's needs following rehabilitation

- A visit to the GP, at the patient's own will or upon an invitation from the GP, and a recommendation to undertake laboratory medical tests.
- A visit to a medical diagnostic laboratory to carry out the recommended medical tests, the results of which are most often delivered to the GP.
- Depending on the results, there are three possibilities: (a) the GP assigns further respective medical tests; (b) if necessary, the GP refers the patient to a specialist for further consultation; or (c) the GP refers the patient for inpatient treatment.
- A specialist can be consulted at a DCC, an MC, an individual specialized health care outpatient department and/or a dispensary (in the case referred to here, at an oncological dispensary), within a few days of referral. The specialist would then give the patient a referral for inpatient treatment.

- A visit to the hospital for inpatient treatment takes place within a few days upon receiving the referral. This time duration varies depending on the patient's diagnosis and state. Conservative or surgical treatment is carried out; if necessary, the patient can be moved to another ward or another medical establishment during the course of treatment.
- Following treatment and primary rehabilitation, there are two possibilities: (a) if necessary, the patient can be hospitalized for continuous treatment and rehabilitation, or (b) the patient can be discharged from hospital for ongoing treatment and rehabilitation under the GP's control. In either case a medical report is prepared which describes the treatment and rehabilitation completed and includes recommendations regarding the treatment schedule and the continuation of therapy. The patient's relatives are acquainted with his/her needs following the discharge.
- Home treatment is controlled by the GP or the nurse from the GP's dispensary.

The advantages of using clinical pathways for the health system as a whole and for each hospital in particular include introduction of evidence-based medicine, support of clinical effectiveness, risk management and clinical audit, optimization of resource management, improvement of multidisciplinary communication, teamwork and care planning and expected cost-reduction by shortening hospital stays. However, clinical pathways discourage personalized care and do not respond well to unexpected changes in a patient's condition, suiting standard conditions better than unusual or unpredictable ones.

6.3 Primary/ambulatory care

The legislations of 1998–1999 (the Health Insurance Act, the Professional Organizations Act and the Health Establishments Act) regulate provision of all levels of care in Bulgaria. The new types of primary and outpatient health institutions that were established include the following:

- single and group practices for primary health care in accordance with the number specified in the National Health Map;
- single and group practices for specialized medical and dental care;
- independent medical diagnostic and consultative centres and medical-technical laboratories.

Every Bulgarian citizen should be covered by the compulsory health insurance scheme to receive a basic benefits package of health services

determined and reimbursed by the NHIF. Health care is provided in accordance with the National Framework Contract.

Primary health care is provided by GPs in private practice, group practice and/or in an outpatient department. Each Bulgarian citizen has a free choice of GP and inpatient facility. By the end of June 2000, 87% of the Bulgarian population had chosen GPs for primary care (1). All types of GP are gatekeepers by law, making referrals to inpatient and outpatient specialists. Patients referred to specialists for treatment following a clinical pathway are paid for by the NHIF with a co-payment of 2% of the MMS for each day in hospital, during the first 10 days of their stay. MMS in 2006 was BGN 160 (€82 at the time of writing). Patients may self-refer to specialists but pay 100% out of pocket. Moreover, women with children and pregnant women have direct access to paediatricians and gynaecologists. The number of patient referrals to specialists is limited for each GP. The number of referral cards is pre-defined on a monthly basis for every GP by the RHIF according to patient lists and the previous month's performance.

GPs carry out basic examinations, diagnostics, treatment (including minor ambulatory operations), provide consultations, and are responsible for prescription of drugs in accordance with the PDL. They also provide family planning training and related activities, preventive activities (immunization), health promotion and health education. In 2005, 65.2% of the total number of GP visits was for patients with chronic and acute diseases, while the remaining 34.8% of visits was for preventive activities for children, pregnant women and for people undergoing health check-ups (29).

GPs provide all kinds of primary services in private practices, group practices and/or in outpatient departments. In 2005, 4586 GPs provided primary outpatient care, 4391 of them worked in private practices and 195 worked in group practice. The number of GPs contracting with the NHIF has been increasing.

Patients have the right to choose their GP and to change GP every six months. There is no limit on the number of insured people registered with a particular GP. According to NHIF data, there were 5340 GPs in Bulgaria with a ratio of one GP for every 1472 citizens in 2005. The distribution of GPs is subject to regional variations within the country and envisioned by the National Health Map. These variations cause inequities in access to health services, particularly for individuals in rural areas. According to the National Health Map, in 2005, the number of working practices exceeded the forecast number by 140% in the Targovishte region but was 67% less than the expected number in the region of Silistra. In 2005 the average number of patients on GPs' patient lists in the region of Targovishte was 1796 compared to 1425 patients in the region of Silistra. The lowest average numbers of insured people per GP in 2005 were found in Pleven

(1037) and in Sofia (1093) (29). In 1999, there were 5.4 primary health care physician contacts in Bulgaria (10) (for further information see Fig. 6.3).

According to NHIF data, in 2005, a person with compulsory health insurance made an estimated 1.6 patient visits (primary, secondary and/or dispensary) to an outpatient specialist, up by 0.11% from the number of patient visits in 2004. Primary consultations had the greatest share of patient visits (52.9%) followed by secondary dispensary visits (17%) and secondary consultations (25.7%). In 2005, physiotherapeutic and rehabilitation activities performed within the framework of social health insurance and highly specialized diagnostic examinations reimbursed by the NHIF increased by 4.7% and 2% respectively compared with the previous year.

6.4 Specialized ambulatory care/inpatient care

Secondary care refers to specialized ambulatory medical services and typical hospital care services (both outpatient and inpatient). In Bulgaria the provision of specialized ambulatory care includes the consultation and treatment performed by dispensaries for psychological diseases, oncological diseases, respiratory diseases, sexually transmitted infections and dermatology.

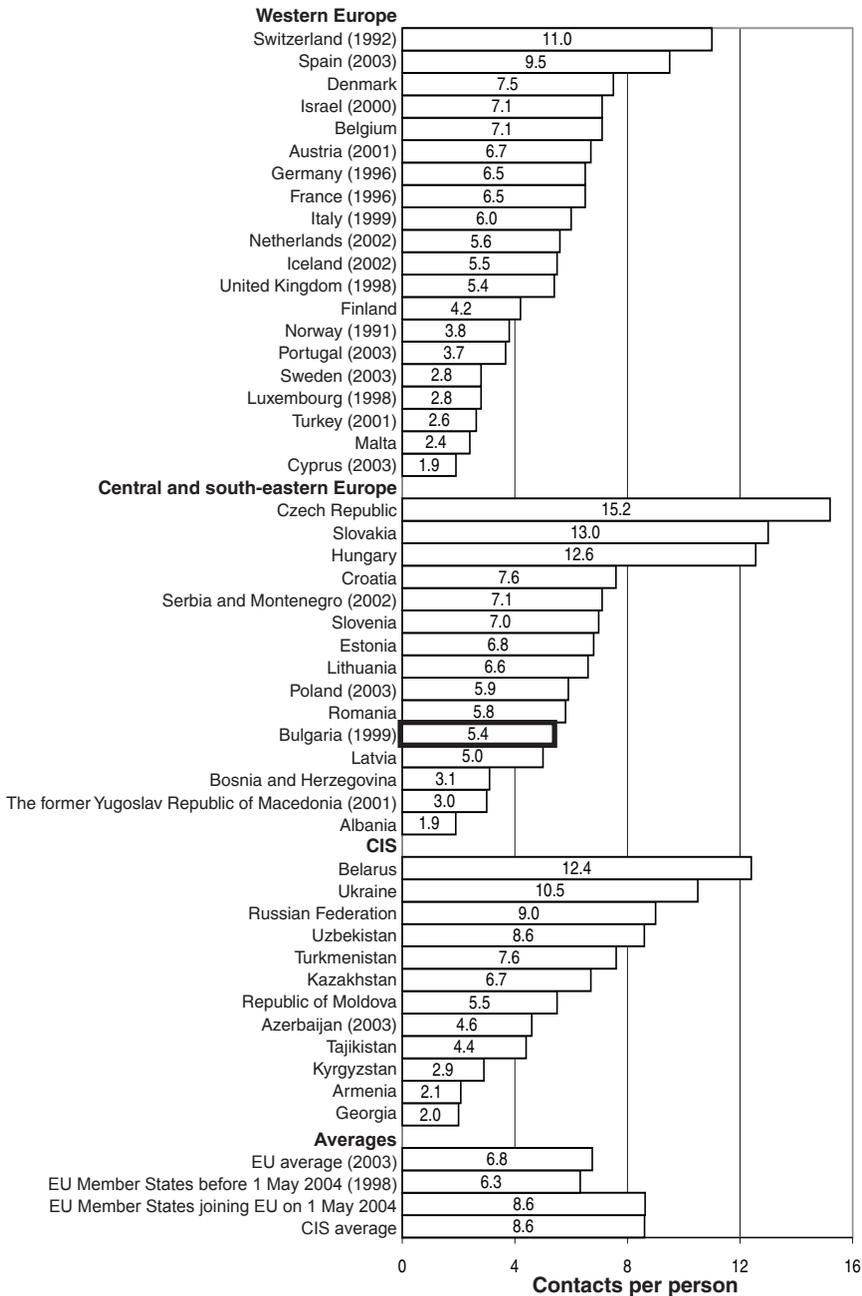
Health facilities that provide specialized ambulatory care can be registered as:

- individual and group practices for specialized medical care within separate medical subfields;
- health centres (medical and dental centres) containing at least three doctors/dentists who are specialists in different medical subfields;
- DCCs containing at least 10 physicians in various specialties, as well as laboratory and image diagnosis centres;
- individual medical and diagnostic or technical laboratories.

Individual and group practices for specialized ambulatory care are registered under the Trade Law as trade companies. For a certain part of them the capital is owned by the State and the rights are exercised by the Minister of Health, whereas for the other part the capital is owned by the local municipality and the rights are exercised by the respective municipal council.

According to NHIF data, in 2005 the NHIF contracted with 1.25 specialized physicians working in outpatient care per 1000 insured individuals. The distribution of specialists varies regionally. There were 1.77 specialists per 1000 insured people in Sofia city, while in the region of Smolian, there were 0.55 specialists per 1000 insured people.

Fig. 6.3 Outpatient contacts per person in the WHO European Region, 2004 or latest available year (in parentheses)



Source: WHO Regional Office for Europe, 2006 (10).

Notes: CIS: Commonwealth of Independent States; EU: European Union; Countries without data not included.

The number of laboratories performing medical and diagnostic activities and functioning under contract with the NHIF was 1225 at the end of 2005, a 32% increase on the previous two years. Clinical laboratory examinations held the greatest share of diagnostic examinations (81%), followed by X-ray examinations (10%). Highly-specialized medical diagnostic examinations were present in 3% of all examinations paid for by the NHIF in 2005. This could be linked to increased salaries of specialists in outpatient care, restructuring of financial mechanisms, beds and personnel cuts. Moreover, in order to increase income a great number of Bulgarian specialists work both in hospitals and for specialized individual medical practices.

Hospital care in Bulgaria is provided by public and private health establishments. According to the Law on Therapeutic Establishments, the hospitals are divided into multidisciplinary (with at least four specialized wards) and specialized hospitals (providing services for certain health conditions or diseases with the same or similar diagnosis: gynaecological, paediatric, psychiatric, respiratory, etc.). Hospitals can also be classified, depending on treatment duration, as an active treatment hospital (for short lengths of stay), a recovery, post-treatment and rehabilitation hospital and/or a rehabilitation hospital. Another way to categorize hospitals is based on their ability to provide specialized care. The hospitals that are able to provide specialized care include: the training hospitals affiliated with the five universities of medicine in the country, the national hospitals, the interregional hospitals, the regional hospitals and the local area multidisciplinary hospitals.

National multidisciplinary and specialized hospitals are trading corporations that are State-owned. Interregional and regional hospitals are joint-stock companies. One part of the capital is owned by the State and the rights are exercised by the Minister of Health, the other part of the capital is owned by the local municipality and the rights are exercised by the respective municipal council. Local hospitals are trading corporations owned by the municipalities in which they are located.

In an attempt to regulate specialized outpatient medical care, there is a monthly limit on the number of specialist referrals provided for patients by GPs.

6.5 Emergency care

Before the reforms, the emergency care network – as with the whole public health system – was extensive, but inefficient and ineffective. The system was generously staffed but necessary training of medical and nonmedical personnel was not provided. In Bulgaria, where cardiovascular diseases and accidents are leading causes of mortality, emergency care was provided by a fragmented network of pre-hospital and hospital institutions with no clear definition of responsibilities and linkages. No national standards existed for the organization, financing, or quality of care. The low quality and the inefficiency of the services became even more obvious with the decentralization of health care delivery and with the limitations of municipal budgets. There was no separation between acute primary care and emergency services. Emergency medical teams in mobile units, health centres and small hospitals catered in effect in most cases (up to 85%) for a family practice-type of demand, and handled few critical emergencies. This vertical separation of clinical services led to expensive duplication.

During the reforms important changes were brought about both by the national government interventions and through the World Bank-funded 1996–2001 Project on Health Sector Restructuring.

During the implementation of the project the emergency care system has been completely separated from pre-hospital and inpatient health care. A three-step system was created for the stabilization and hospitalization of patients in case of emergency.

Organization of emergency care

Since 2001 emergency care services cover the whole of Bulgaria and each of the 28 administrative districts have a Regional Centre for Emergency Care. There are also 50 emergency care branches organized in accordance with the National Health Map. The Ministry of Health is responsible for the organization, planning and financing of all activities related to the provision of emergency care in Bulgaria. The Regional Centres for Emergency Care are the key unit in the organization of the emergency care network. Their structure and activities are set out in detail in a Ministry of Health Regulation, which also defines their specific functions. Fig. 6.4 presents the organization of emergency care in Bulgaria.

According to the Public Health Act, the Regional Centres for Emergency Care are public medical facilities and are financed from the state budget. Each

Centre is headed by a Director who signs the contract with the Minister of Health emergency care staff are covered by the Labour Code. According to the 2003 state budget, there were 6731 employees in the 28 centres but this figure includes only permanent staff.

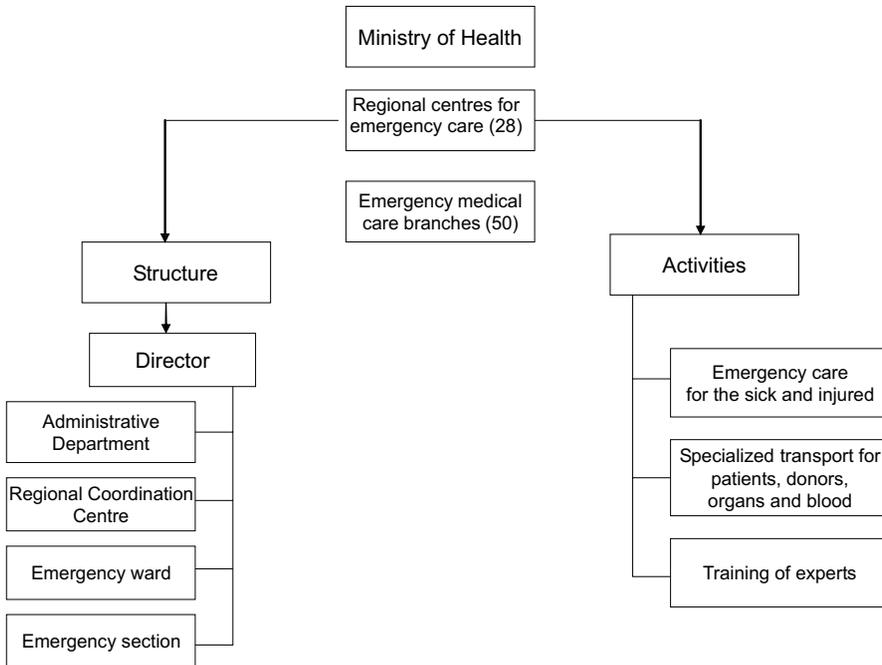
The Regulations on the Structure and Activities of Regional Centres for Emergency Care, issued by the Minister of Health in 1999, stipulate that each centre should comprise an administrative department, a regional coordination centre and divisions for emergency care in the region including an emergency ward and an emergency section.

A centre's activities are carried out by the following teams:

- the team of the regional coordination office, comprising a medical doctor (as shift leader) and one or more paramedics;
- the resuscitation team, including a doctor, a paramedic and a driver;
- the medical team, including a doctor (head of the team) and a driver;
- the pre-medical team, including a paramedic (head of the team) and a driver;
- the transport team, including a driver (head of the team) and an attendant (41).

The total number of physicians, nurses, other medical and nonmedical staff, drivers and support staff employed in emergency care runs to over 4000 people. The number of teams in each centre depends on the population and area of the region served. Each team serve, on average, between 20 000 and 30 000 people. Despite the efforts made on reorganization of personnel, emergency care in Bulgaria is still characterized by inappropriate staffing patterns with overspecialized physicians and undertrained paramedical staff.

Citizens are obliged to inform/call the nearest emergency medical care centre, medical treatment facility and/or the police in the case of an accident or an emergency. All medical treatment facilities are required to provide emergency medical procedures free of charge regardless of a patient's citizenship, address or social security status. If a facility refuses to provide emergency care to an individual in a life-threatening condition, a fine ranging from BGN 1000 to 5000 may be imposed and staff medical licences may be revoked for a time period ranging anywhere from three months to a year depending on repeated violations. Foreign residents not enrolled in any insurance schemes pay for emergency services according to the hospital rates.

Fig. 6.4 Organizational structure of emergency care

Emergency care activities

The analysis of emergency care indicators leads to the conclusions presented here.

- The number of outpatient examinations provided by emergency care centres in 2004 is twice as high as the number of emergency calls in the previous two years, which is indicative of the inadequate operation of primary and specialized pre-hospital medical care.
- Calls that proved not to involve emergency situations accounted for 15.9% of all emergency calls in 2003 and 16.4% in 2004, which is indicative that there are disparities in access to non-emergency care.
- Of all who sought the service of emergency medical centres, 10.7% were admitted for surgery or to wards in 2003 and 10.6% in 2004, indicating that emergency care in Bulgaria is used by the population as a means of accessing specialized medical care.
- Hospitalizations following emergency care reached 33.6% in 2003 and 37.1% in 2004 (42).

Among the challenges in delivering effective emergency care is the underdeveloped road network and communication infrastructure, particularly

for people in rural areas. Mountainous terrain and the lack of available airports make it hard to transport critically ill people from hard-to-reach areas. As a result, most emergency services remain in larger specialized and/or university hospitals and cities (43).

Future emergency care reforms are on the Government's agenda, including the need to increase the linkage and financial incentives between primary medical practices and emergency units in areas where emergency care access is low and there are increased penalties to medical establishments for refusing emergency care to patients.

6.6 Pharmaceutical care

Until 1991, the production and distribution of pharmaceuticals was highly centralized and came under the remit of the State Pharmaceutical Company, which covered all functions related to the pharmaceutical sector. The State Pharmaceutical Company was also in charge of a network of pharmacies and sanitary supply shops, specialist warehouses and depots, importers and distributors of medicinal drugs and sanitary suppliers. A mixture of decentralization policies and the transition to a market economy broke up this monopoly. The Pharmaceuticals and Human Medicine Pharmacies Act 1995 (14) created the basis for restructuring and privatization of the production and distribution of pharmaceuticals, and most pharmacies are now privatized.

There are currently 30 separate state-owned domestic pharmaceutical manufacturers, 330 wholesalers who import and market pharmaceutical products for over 4518 pharmacies around Bulgaria and less than a dozen distributors, which hold approximately 90% of the domestic pharmaceutical market. In 2004 the overall number of pharmacies in Bulgaria was 4518 compared to 4000 in 2003 (12) and 1020 in 2000 (10). The number reaches its capacity limit due to the fact that a certified pharmacist can only manage one pharmacy. The pharmacy network is overdeveloped to a point where often dozens of pharmacies exist in an area of only a few hundred square metres.

The main domestic pharmaceutical manufacturers emerged from the former Bulgarian pharmaceutical companies Balkanpharma, Sopharma and Biovet after their privatization and restructuring. The main pharmaceutical manufacturers in Bulgaria are: Aktavis (with its three subsidiaries), Biovet, Sopharma, Unifarm, NIHFI, Chaikapharma, BU-Bio, the National Centre for Haematology and Transfusion, Inbiotech, Biomeda and Vet Prom.

A typical feature of domestic pharmaceutical manufactures is their production of generics drugs for the Bulgarian, Russian, Polish, Ukrainian,

Latin American and Asian markets. Although figures vary from year to year, domestic production normally accounts for 30–40% of domestic sales in value and for 65–75% of the number of packages sold.

According to existing legislation, pharmaceutical manufacturers can directly market their products through authorized distributors/dealers and they can only participate in government procurement tenders organized by the Ministry of Health, the NHIF and hospitals through their authorized distributors/dealers – the wholesalers.

The total number of importers/wholesalers on the market at the end of 2004 was approximately 330. Under a change in the Regulation on the Wholesale of Drugs, in 2004, licences were issued by the Minister of Health, coordinated with the BDA. Domestic pharmaceutical manufacturers are entitled to distribute their own products, based on the manufacturing licence that they have and they can participate in government procurement tenders organized by the Ministry of Health, the NHIF and hospitals directly.

Foreign manufacturers are represented in Bulgaria in two ways.

- By representative offices, which are not legal entities and as such perform only promotion and marketing-related activities. The sale of drugs is carried out directly from the foreign legal entity to an authorized dealer who then distributes and sells the drugs to pharmacies and participates in tenders.
- By local subsidiaries (legal entities), which are owned by foreign companies who have a drug distribution licence according to Bulgarian legislation. Local subsidiaries can participate in Ministry of Health and NHIF tenders directly and can legally sell drugs directly to pharmacies, although they do not, because they do not have their own distribution network in place. For the same reason, they also authorize local wholesalers for hospital tenders.

Recently, a greater number of foreign pharmaceutical companies have been establishing local subsidiaries, licensed as wholesalers under the Bulgarian law. The licences are issued by the Ministry of Health upon coordination with the BDA. More than 100 international pharmaceutical companies have representation offices in Bulgaria and 23 of them are members of the Association of Research-Based Companies. The majority are members of the Association of Foreign Pharmaceutical Manufacturers in Bulgaria.

The Pharmaceuticals and Human Medicine Pharmacies Act explicitly forbids the sale of prescription drugs in outlets other than pharmacies. OTC products can only be sold in drug stores and pharmacies.

Pharmaceutical consumption has been increasing since 1999 at a rate faster than that of total health expenditure, particularly in 2001 and 2002. The overall pharmaceutical market for 2002 accounted for BGN 556.1 million (€283.8 million), which increased to BGN 622.1 million (€318.827 million)

in 2003 and BGN 685.0 million (€350.1 million) in 2004 (based on carriage and insurance paid (CIP)/Ex-Works (EXW) prices) (Table 6.1). In terms of retail prices the Bulgarian pharmaceutical market reached BGN 1235 million (€631.5 million) (pharmacies plus hospital sales), which is an increase of close to 20% compared to 2004. While pharmaceuticals consumption has increased, the actual number of packs sold overall decreased to 153 million packs in 2004 from 164 million packs in 2003.

Table 6.1 Bulgarian drug market (million BGN)

Year	Imports	Domestic production	Total
1999	160.5	128.0	288.5
2000	185.2	110.5	290.5
2001	289.9	197.2	487.1
2002	359.7	196.4	556.1
2003	410.9	211.2	622.1
2004	484.6	200.4	685.0

Source: Bulgarian Drug Agency (38).

The main customer for all pharmaceuticals in Bulgaria is the NHIF, which subsidizes the outpatient drugs for vulnerable groups and pharmaceuticals for 21 university hospitals, 28 multidisciplinary hospitals, dispensaries and 64 haemodialysis centres. The NHIF reimburses pharmaceuticals fully or partially.

Priority reimbursable disease groups are for cardiovascular diseases, neurological diseases, gastroenterological diseases, diabetes, sclerosis, multiple sclerosis and metabolic disorders. Central and regional budgets subsidize pharmaceuticals for such population groups as those on low income, the unemployed, the retired, children and individuals in the armed forces. (For more information on pricing and reimbursement see Subsection 5.1.5).

Bulgaria has signed and ratified the Madrid Convention and is considered to be World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) compliant. In 2003 and 2004 the Bulgarian Ministry of Health and Parliament endorsed the Data Exclusivity clause and “Roche-Bolar” clause (pre-patent expiry development and registration work for generic medicines) adopted by the EU Council of Ministers to strengthen European competitiveness. For Bulgaria it was translated into the recognition of a 20-year patent protection for pharmaceutical products. Supplementary protection certificates are envisaged by the date of accession. In 2003 the Government introduced a six-year data exclusivity period to provide additional market protection for originator pharmaceuticals by preventing health authorities from

accepting applications for generic medicines during the period of exclusivity. For high-tech and bio products the period of market exclusivity is 10 years. Parallel to that, a Roche-Bolar clause allows for a drug manufacturer to initiate testing and registration of a drug two years before the patent expires, in order to start manufacturing the drug immediately on expiry of the patent.

Bulgaria has also started to introduce good medical practice standards, which are obligatory for pharmaceutical enterprises. (For more information on pharmaceutical regulation see Subsection 5.1.5.)

At the time of writing, Bulgaria is looking at trying to help create managerial, executive and control structures adequate to the harmonization of the Bulgarian legislation with EU requirements. Bulgaria is also looking towards developing IT infrastructure and the options for integrating adequate multidirectional and multifunctional information systems while ensuring strictly regulated levels of access. Other aims, to increase the efficiency and effectiveness of the pharmaceutical sector, include:

- ensuring a controlled balance between the innovation achievements in the pharmaceutical industry and generic policy, while observing requirements for defending intellectual property;
- providing possibilities for achieving competitive prices of Bulgarian-made generic drugs;
- contracting the route of drug products to the customers, beginning with the use permission, through price registration, PDL nomination, retail and wholesale trade;
- updating a normative base for regulating the pharmaceutical sector and use of medical products.

6.7 Rehabilitation/intermediate care

Rehabilitation is provided in ambulatory and inpatient settings. In ambulatory care, rehabilitation and physiotherapeutic services are provided by specialized individual practices for outpatient care as well as in medical diagnostic centres.

In inpatient care, physiotherapy and rehabilitation wards have been established at multidisciplinary active treatment hospitals for inpatient services. The NHIF reimburses hospitals for physiotherapeutic and rehabilitative services provided to patients according to two clinical pathways: physiotherapy and rehabilitation following myocardial infarction and physiotherapy and rehabilitation following

cerebral stroke. In 2005 the two clinical pathways expanded in diagnostic coverage to include: physical therapy and rehabilitation following myocardial infarction and heart surgery, and physical therapy and rehabilitation of general nervous system diseases.

In 2004, there were a total number of 4550 beds for the rehabilitation sector in Bulgaria. This includes: 1 multidisciplinary hospital for post-treatment, continuous treatment and rehabilitation with 120 beds; 9 specialized hospitals for post-treatment, continuous treatment and rehabilitation with a total number of 591 beds; and 24 specialized hospitals for rehabilitation with 3804 beds (12). Besides hospital care, rehabilitation and spa treatment supervised by specialists are also carried out in a number of hotel-like establishments in seaside, mountain and spa resorts throughout the country.

6.8 Long-term care

Long-term care includes social and medical services provided to the elderly and people with physical and mental disabilities. Long-term care is provided by long-term care facilities, which can be categorized as inpatient facilities and/or home care facilities. Such services are state-funded and are run by the Ministry of Labour and Social Policy according to the 1998 Social Assistance Act.

Elderly care is organized by municipal social assistance services. Eligibility for assistance is based on a survey and a recommendation of a physician and a social worker. Health care for retired people is provided by a physician and a nurse.

Adults with physical disabilities living within the community can register for services for social rehabilitation and integration for people in need of social services (55 facilities with 2327 places in 2005). People within institutions can register in retirement homes for the disabled (26 facilities with 1540 places in 2005) (2). Patients are registered for these facilities according to participation in social assistance services and recommendation by a physician and a social worker.

Children with learning disabilities include children between the ages of 7 and 18 with learning disabilities. Severely disabled children can be registered in a day care home for children and young adults with learning disabilities (45 facilities in the country with 1128 places in 2005), and/or at an institutional home for mentally challenged children and young adults (54 facilities with 4491 places in 2005). There are also vocational training social establishments

(9 facilities with 916 places in 2005) for which children with learning disabilities can register (2).

6.9 Services for informal carers

The institutional network for providing services to individuals unable to take care of themselves remains underdeveloped in Bulgaria. This has widespread social ramifications for the country, as the burden of care for these patients is passed on to family members and relatives who have limited incomes and, as a result of caring for their loved ones, do not have the option of being employed in the formal sector.

In an attempt to formalize this work, the Ministry of Labour and Social Policy implemented a national programme “From social benefits to employment” in 2003. The programme’s components included the creation of positions of “personal assistant” and “social assistant”, which were created to replace informal employment for people already providing these services for severely ill and disabled adults and children.

Eligibility for a severely ill and/or disabled adult/child (participant) is determined by health status and is approved by a specialized medical body. In order to be eligible and considered as a personal assistant, programme applicants have to be either family members or close relatives of the participant; they cannot be employed or be receiving any benefits and they have to be living with the participant. Eligible assistants sign an agreement with an authorized employer (either the office of the Social Assistance Agency, municipal administration or an authorized firm) who is responsible for their performance. For their services they receive an estimated yearly salary of €1100 (2006 estimate). In 2004, 9062 personal assistants cared for over 10 000 people (up from 6230 in 2003).

The results achieved so far have been positive for all stakeholders involved: the patients, the assistants and the State. Patients are achieving better standards of living and have easier access to social assistance and health care. Assistants have achieved legal employment status and as a result are entitled to benefits and rights under labour legislation. They also have a chance to enhance their skills and qualifications formally and some assistants have been able to advance their qualifications and training. The State has benefited in the reduction in the amount of funds allocated for monthly social benefits.

In 2005, a national programme on assistance to ill and disabled people was implemented. It had a budget of BGN 27.7 million (€14 million) that involved 10 131 personal assistants and 2059 social assistants.

6.10 Palliative care

Palliative care is regulated by the 2004 Health Act. Palliative care refers to the care of patients whose disease is not responsive to curative treatment; care for the patient then centres on the control of pain and on psychological, social and spiritual problems. The goal for such care is the achievement of the best possible quality of life for patients and their families. A regulation for the provision of palliative care has been developed, alongside a framework for quality standards.

Palliative care provision involves the family practitioner, treatment facilities for outpatient and patient care, dispensaries and hospices. Care is rendered by a team consisting of a doctor, a nurse, a social worker, a psychiatrist or a psychologist (if needed), a minister of the respective religion (if requested), and volunteers. Everyone committed to the provision of palliative care undergoes the respective training course, which is revised regularly.

Palliative care is provided by hospices. In 2005 there were 33 functioning hospices in the country, with 287 beds. Some hospices provide some aspects of palliative care at the patient's home. In 2003, the NHIF introduced a clinical path for palliative care: palliative care for terminally ill cancer patients, providing reimbursement for a 20-day stay per year for patients needing specialized palliative care.

6.11 Mental health care

Mental health reform was introduced alongside general legislation for health reform in Bulgaria. The National Programme for Mental Health of the Nationals of the Republic of Bulgaria (2001–2005) was initiated in 2001 and was revised and improved on by the Mental Health Policy of the Republic of Bulgaria (2004–2012), which was adopted by the Council of Ministers in July 2004 along with the new National Plan for Mental Health Policy Implementation (2004–2010).

Major legal requirements referring to mental health care are also included in Chapter V of the 2004 Health Act. The Health Act affirms the following basic principles with regard to the treatment of people with mental problems: minimum personal freedom limitation; respect for patients' rights and reducing their institutional dependence; adherence to humanistic principles; stimulation of self-assistance and mutual assistance and ensuring social and professional support for those needing it; building an efficient network for outpatient psychiatric care; giving priority to care provided by the family and the

community; and participation in nongovernmental humanitarian organizations in the course of treatment and social adaptation.

The major aims of these laws and policies include protection and improvement of the population's mental health, application of an integral approach to prevention, treatment and rehabilitation and the integration of mental health care into the health system.

Current mental health policy is oriented towards multifunctional and community-based organizations coordinating with social assistance, education and employment services. The action plan is implemented in collaboration with local administration and government bodies as well as with NGOs.

Mental health facilities include ambulatory and inpatient care, as well as services provided by dispensaries, state-run social establishments and care by nongovernmental and charitable organizations. Ambulatory care is provided to patients with less severe problems and/or mild chronic diseases, dispensaries provide care for patients with more serious illnesses (e.g. salient forms of mental deficiency), hospital psychiatric wards care for acute psychiatric cases and psychiatry hospitals care for patients with chronic diseases. There are no regulations calling for the specialization of psychiatric ambulatory and inpatient services based on disease type in Bulgaria.

Ambulatory mental care is provided by GPs, but largely by psychiatric offices at ambulatory care facilities (DCCs, MCs, MDCs) and at individual psychiatric practices. In 2003, the NHIF had signed contracts with 427 psychiatrists (60% of the total number of psychiatrists in Bulgaria).

Hospital care is provided by four different mental health institutions: 11 state psychiatry hospitals (2750 beds); 12 psychiatric dispensaries (1524 beds); 11 psychiatry wards at multidisciplinary hospitals; and 4 university psychiatry clinics. The psychiatric network has 5439 beds (12).

Improved access to outpatient psychiatric care as well as the implementation of all other measures envisaged by the action plan made it possible to reduce the number of beds in psychiatric hospitals from 5840 in 2001 to 5201 in 2003 – an 11% reduction across a two-year span. This was accomplished despite a 6% hospital admission increase. There were 4.5 beds in psychiatric hospitals per 10 000 people in 2004 (12).

Psychiatric dispensaries provide preventive treatments and certain social functions. They provide predominantly outpatient care, implementing programmes for active identification; early diagnosis; continuous treatment and observation; and programmes on social adaptation. Their main clientele are patients suffering from schizophrenia and affective psychosis; patients who are senile and/or pre-senile; patients suffering from mental deficiency, anxiety neurosis and addictions; and patients with other mental states. In 2004,

dispensaries had more psychiatric patients (16 997 patients) than the psychiatric hospitals (9861 patients) (12).

Mental health care is also supported by the Ministry of Labour and Social Policy and is provided by many state-run social establishments (see Section 6.11). This includes: day care centres for children with mental illnesses (45 centres with 1128 places in 2005); day care centres for adults with mental illnesses (7 homes with 107 places in 2004); long-term care homes for children with mental illnesses (29 homes with 1750 places in 2005); and long-term care homes for adults with mental illnesses (54 homes with 4491 places in 2004) (2). Medical services in day care homes are provided by GPs and nurses. Psychiatric treatment (and consultative care) are provided by psychiatrists. Health care is financed by the NHIF based on the National Framework Contract.

Over the last few years, civil and charitable organizations have also been establishing communities for the treatment of drug addicts. Funding sources have been supported by charities, relatives of the affected and through various implemented projects.

There is a staff shortage in the mental health care network in Bulgaria. In 2004, there were 610 psychiatrists (representing 2.2% of all doctors). The ratio of 0.8 psychiatrists per 10 000 people is lower than the ratio of neurologists (1.4 per 10 000 people). In the mental health network there are also 63 psychologists, 1210 nurses (1.7 nurses for every doctor) and social workers. However, their numbers for the sector are low as well (12).

The new mental health action plan focuses on the enlargement of the network of day care homes, the creation of “protected homes” and enhancing employment opportunities for people with mental problems. This process involves a range of stakeholders, including municipal authorities and a number of local civil organizations undertaking voluntary social activities.

While mental health policy is still at an initial stage in Bulgaria, a dual trend seems to be emerging: on the one hand, outpatient care for mental health patients is increasing, while on the other hand, there is a tendency for the deinstitutionalization of patients, more integration with social services, active participation of NGOs and targeted provision of health care, which is specific to unique social circumstances.

6.12 Dental health care

Dental health care is provided in ambulatory and inpatient settings. In accordance with the Health Care Establishments Act (16), dental care is provided

by individual and group practices for primary or specialized dental care, as well as in dentist surgeries and medical and dental centres. Dentists specialize in general dental work in individual and group practices. While dentists with similar specializations work in group practices, dentists with different specialties work in dental centres and medical and dental centres.

Regulations for treatment facilities for primary and specialized outpatient dental care are similar to those for primary and specialized ambulatory medical care. There were 56 dental centre surgeries and 44 medical and dentistry centres in 2004 (12). Dental care facilities operate in a way similar to treatment establishments for ambulatory medical care. They are free to enter into an agreement with the NHIF and provide services covered by the basic benefits package. They may contract with VHICs as well as receiving fee-for-service payments out of pocket. In 2005, 5651 contract agreements by medical and dental centres were signed with the NHIF. Of these, 5588 contracts were for primary dental care and 63 contracts were for specialized dental health care. The number of dentists contracted with the NHIF increased by 8% in 2003 compared to the previous year (29).

The NHIF fully and/or partially reimburses the following range of dental care services:

- primary dental health care;
- specialized outpatient dental health care for children;
- specialized outpatient dental surgery care;
- specialized outpatient dental care under a general anaesthetic for people aged up to 18 years with mental illness.

Hospital dental health care is reimbursed by the NHIF according to five clinical pathways. Quality standards for outpatient dental care with respect to accessibility, therapeutic and surgery treatment are included in the National Framework Contract.

6.13 Alternative/complementary medicine

Non-medicinal products of organic and mineral origin; non-traditional physical methods; acupuncture; iris, pulse and auricular methods of medical testing; and dietetics and healthy dieting are permitted in Bulgaria.

Homeopathy can be practised by degree-holding physicians and dentists. Other methods of alternative medicine permitted can be applied by degree-holding physicians, dentists and pharmacists; individuals with a medical degree obtained at a college or those with a Bachelor's degree in public health;

and individuals who have a secondary-school certificate and have attended a specialized programme training for at least four semesters at a university of medicine.

Providers of alternative medical treatments must register their services with the regional health administration. Regional health authorities control the implementation of legal requirements, treatment effects, and patient complaints.

Patients of alternative medical practitioners have to be registered in a visitor's book and necessary patient data (including health problems and treatment performed or prescribed) have to be collected in case any adverse reaction occurs. Complementary practitioners are liable for the application of unconventional treatment methods.

Advertising for alternative treatment methods is forbidden and unconventional treatment is paid out-of-pocket by the patients themselves.

The number of persons applying unconventional methods of diagnosis and treatment is considerable and the lack of regulations and controlling mechanisms was a problem until the recent passing of the 2004 Health Act. Regulation of the practice of alternative medicine within the Health Act is an attempt to prevent malpractice.

6.14 Health care for specific populations

Compulsory health insurance is assured to be equitable for people permanently employed in the army, for refugees, for criminals under arrest, for the police and for people of ethnic Turkish origin. Ensuring minority access to health for the 300 000 Roma community members has been a problem for Bulgaria.

The Roma community is the youngest ethnic community in Bulgaria. They have the highest birth/death rates and are subject to a tenfold higher rate in poverty compared to other Bulgarians. They also comprise a substantial part of the street children, of the homeless and of sex workers. Their low living standard, insufficient education, frequent migratory status, limited access to adequate sanitation and water and high unemployment have contributed to the disparity in access to health for this section of the Bulgarian population.

Under the Health Insurance Act, all members of the Roma community are insured under compulsory health insurance. The insurance contribution is paid out of the unemployment fund (for a particular period of time) for those who are unemployed and out of the state budget for those registered for social assistance. Equality is therefore legislatively ensured. However, culture differences and low

levels of education, along with frequent migration, hinder the implementation of legal regulations for the Roma community.

To help limit the disparities in access to care, a policy was elaborated and implemented in order to solve the health problems of specific populations, including the Roma community, inhabitants of small settlements who live far from medical centres, and elderly villagers.

The major aspects of public health development can be delineated from this policy.

- The stabilization of the institutional organization for public health protection (the RIPHPI network) and the enlargement of its potential, in close collaboration with the treatment network and the national centres, alongside the development of international collaboration in this area.
- The construction of a viable integrated public health care organization with the participation of governmental bodies of social policy, ecology, agriculture, education, youth and sport; local self-government (municipal authorities); business and banking organizations; information systems and means of communication.
- The assurance of citizen participation in identifying the priorities of health policy at national and local levels and implementing the national and local public health policy.

For the Roma community, national and local programmes are implemented in collaboration with a number of Roma organizations that aim to integrate the Roma community into the health system. At national level, people belonging to the local community are trained as mediators in charge of enhancing community public health knowledge, to serve as a link to treatment establishments and facilitate some specific tests of the health status of the Roma population, as well as to coordinate local programmes. At local level, training programmes are implemented by medical experts with the aim of improving the health culture of the Roma community, including family planning and prevention of sexually transmitted infections. Medical specialists of Roma origin are trained as well. Together with the municipal authorities' assistance, conditions are being created to bring health care closer to the Roma population, by opening medical and dental outpatient departments and by having consultations in areas with a high concentration of Roma people. The Roma population is also provided with both monetary and in-kind assistance by social assistance services to help improve their social and economic conditions.

In 2000–2004 the Ministry of Health and the Open Society Institute and Soros Foundation organized a number of conferences related to the health protection of the Roma population, with representatives of Roma organizations actively taking part.

Inequality of access to and use of health services also represents a major challenge for Bulgarians who are disabled and suffer from certain chronic conditions. Considerable success has been achieved in assuring equality and health care provision for the disabled populations and for people suffering from endocrinological and metabolic diseases, oncological diseases, tuberculosis, AIDS and other infectious diseases. However, there still remains a comparatively large group of the population (people and families with low incomes, the undereducated and the unemployed) who are not getting the same access to care as other groups in the society.

7 Principal health care reforms

Since the 1980s Bulgarian health care has seen many changes. An overview of the earlier and more recent reforms is given in Section 2.1, and in more detail in the earlier edition of *Health Care Systems in Transition: Bulgaria (1)*. The following sections provide a detailed account of political and organizational changes within the context of the overall national reform programme. The chapter also considers the major implications of the previous reforms and their impact on the current health system in Bulgaria.

The main health policy reforms are the consequence of a mixture of external (EU, International Monetary Fund, World Bank) and internal pressures (political transition), and of increased demand for accountability and transparency. The reforms were oriented towards increasing efficiency and financial stability of the health sector, ensuring quality of health services, creating a balance in the relations and functions of the stakeholders in the system and harmonization of the legislation and development of the health insurance model in Bulgaria.

7.1 Analysis of recent reforms

Establishing the compulsory health insurance system in Bulgaria was followed by a cycle of legislative Acts that formed the basis for radical reforms in the field of health care. The major steps of the reforms and legislation are presented in the Box 7.1.

The health insurance system in Bulgaria was introduced in 1998 when the Health Insurance Act was adopted. It was the legal basis for the introduction of both compulsory and voluntary health insurance in the country. The Health Insurance Act established the NHIF as single statutory insurer, defined the

Box 7.1 Major reforms and policy initiatives, 1989–2007

1989 Beginning of democratic transition
1990 Re-establishment of Bulgarian Medical Association
1991 New Constitution of the Republic of Bulgaria
1991 Local Self-Government and Local Administration Law
1991 Public Health Act
1991 Regulation on Medical and Dental Private Practice
1994 Government decree on contracting out for general services
1995 National Health Strategy
1995 Pharmaceuticals and Human Medicine Pharmacies Act
1997 Amendments to People's Health Act
1997 Law on Health and Safe Working Conditions
1998 Health Insurance Act
1998 Act on the Professional Organizations of Physicians and Dentists
1999 Act on Narcotic Substances and Precursors Supervision
1999 Health Care Establishments Act
1999 Foods Law Act
2000 1st National Framework Contract (yearly basis)
2001 National Health Strategy
2004 Hospital Financing Reform
2004 National Drug Strategy
2004 Act on Transplantation of Organs, Tissues and Cells
2004 Health Act

contractual basis between NHIF and the health care providers and introduced the National Framework Contract that provided the framework for paying for health care services provided to the insured population as a basic benefits package.

Private practice was legalized in 1991. Now it includes dental practices, pharmacies, physicians' surgeries, laboratories and outpatient clinics and polyclinics.

As mentioned in the earlier edition of *Health Care Systems in Transition: Bulgaria (1)*, strengthening of primary health care ensured that the role of GPs as gatekeepers was a cornerstone of the health system at the beginning of the health system reforms. A free choice of GP within a region of patient residence was also introduced.

Reform of the health system included the enactment of the Health Care Establishments Act (16), which regulated the organization of medical (inpatient and outpatient) and dental care. According to this Act the existing public and

private health care establishments were reorganized. Physicians and dentists received ownership of their single practices for primary and specialized medical and dental care. Group practices, MCs, DCCs, laboratories and hospices were established by the State or the municipalities as companies, cooperatives, shareholding or limited liability companies, either independent or joint. It also included procedures for privatization of both state and municipal health facilities.

Since then consumers (citizens and patients), providers (outpatient and hospital care health institutions) and agents (third-party payers – public and private health insurance organizations) became key players in the health system with relative autonomy in generating and use of health resources.

Aims and background to reform

The structural health care reform in Bulgaria was directed in three major directions: restructuring of the health financing system, based on compulsory health insurance; reorganization of primary health care; and rationalization of outpatient and inpatient facilities.

Decreasing suspended health insurance rights

Under the 1998 Health Insurance Act, Bulgaria implemented universal health insurance coverage, which is compulsory and based on a solidarity principle of paying insurance contributions.

With the implementation of parts of the information system of the NHIF, as well as analysis of the health insurance status of the population, it was found that nearly 1 million people had suspended health insurance rights in Bulgaria, which was found to affect their access to publicly funded medical services. People with suspended health insurance rights included people of low socioeconomic status who were eligible for social support but never applied for it, Bulgarian citizens living abroad for a long time and high-income people dissatisfied with the quality of health care offered by compulsory health insurance and able to pay out-of-pocket for the desired services.

In order to decrease the number of individuals with suspended health insurance rights, those who did not pay premiums were allowed to start doing so but to cover the contributions of the previous period, following an instalment plan until the end of 2004. This period was prolonged till the end of 2006, for low-income individuals. As a form of social security measure, a new amendment to the Health Insurance Act stated that the State will cover the contributions

for pensioners, persons disabled from wars, children under the age of 18 and citizens receiving certain social security benefits.

Increasing the efficiency of the system

The establishment of the NHIF information system was a task undertaken by nearly every government since 1999. The NHIF information system was developed with the help of a World Bank loan under the Health Sector Reform Project.

After the failure of the first attempt with a contracted company, a second attempt to conduct a tender was made. With a long delay at the decision consortium level, Bulgaria was selected to develop the NHIF information system. The ministers' cabinet came with more enthusiastic ideas, which included the establishment of an integrated information system in the health sector for all health care facilities as well as for the creation of electronic health cards. The establishment of the NHIF information system and the integrated system of the health sector is crucial for better resource allocation in the system as well as for better management and accountancy.

Hospital care financing reform

Reform of hospital care was also a priority of nearly every government. A strategy for the development of the hospital sector in Bulgaria was approved by the Council of Ministers. In 2004, Bulgaria introduced a new system of hospital financing for the health system. According to a mandate of the Government of the Simeon II Party, three draft laws from the Simeon II Party, the Movement for Rights and Freedom and the United Democratic Forces were introduced in the Parliament, which led to the Health Establishment Act Amendment.

After the conclusion that the administrative decisions for closing down inefficient hospitals would not be politically acceptable and there was still no clear privatization strategy, the decision was taken and recognized in the Act on the NHIF Budget that there would be a single source of public financing for health care establishments. The NHIF would remain the payer and Ministry of Health should "steer and channel" a single method of payment based on performance and case payments (clinical pathways) with a single flat rate per diagnosis (for details see Subsection 3.6.1).

The change in hospital financing was supposed to enhance the restructuring of the sector based on competition between the health care providers and was supposed to be established according to NHIF criteria for the contracting partners in accordance with the National Framework Contract.

Although on the one hand this reform avoided discrimination between health care establishments, on the other hand, it ended up creating even more problems as the reform was not accompanied by other necessary measures to change the financing system. For example, while reimbursement based on clinical pathways is a good method for ensuring the quality of care, it may not be a good method for financing as there are no ceilings for hospital activities and the payment is retrospective, which may decrease the financial stability of the NHIF.

According to the latest analysis, by 2007 the NHIF will not be able to cover the costs of the basic benefits package with the current level of revenue (6% of individual assessed income as compulsory health insurance contributions). There is a need to increase the level of public expenditure on health, optimize and better control the distribution of funds and diminish the level of unregulated payments, which drain the system.

Quality improvement of health services

The establishment of medical standards for different medical specialties is laid down in the 2004 Health Act (Article 19 (1), paragraph 2). According to this Act, the 28 regional centres for health have the responsibility to control medical specialties, which also includes the monitoring of competence and quality of care.

Reimbursement per case through clinical pathways, which is the financing mechanism used by the NHIF to reimburse hospitals and specialists, is also used as a quality assurance mechanism to monitor care. As a financing institution, the NHIF created a department to conduct medical auditing for all the medical establishments contracted with the fund (see Subsection 4.1.3).

Amendments to the Act on the Professional Organizations of Physicians and Dentists (15) impose the obligation for professional associations to establish rules for good medical practice for their respective professions. As a result, concepts such as lifelong learning and continuing medical education were accepted and developed as part of the quality assurance system. Professional associations have established credit systems for their respective professions and together with medical universities have helped to develop the system for continuing medical education of medical professionals.

In July 2003 a new regulation on accreditation for health establishments was adopted, which foresees process and activities evaluation.

The 2004 Health Act further defines the public health system and the system for health service provision, as well as containing chapters on mental health, patient rights, medical professions and education to allow Bulgaria to harmonize legislation with EU legislation. However, the Bulgarian health system still faces

difficulties. There is a lack of coordination between the different regulative documents, there are unsettled public terms (namely Article 109 of the Health Insurance Act) and there is a need to introduce further legislation to achieve harmonization according to the EU regulations.

7.2 Future developments

The National Health Care Strategy for 2007–2012 highlights nine strategic goals and priorities for future health reform. The goals include:

- the need to improve the health of the nation;
- the need to provide high-quality and guaranteed health services;
- the need for optimization of primary outpatient medical care;
- the need for optimization of the health network;
- the need for transparent and fair drug policy;
- the need for planning, organization and development of human resources in the health system;
- the need to develop and expand upon electronic health care and IT;
- the need to guarantee the financial stability and sustainability of the national health system;
- the need for efficient implementation of European legislation and absorption of EU funds (39).

The desired results include:

- guaranteed rights for the patient with regard to health information, representation, protection and control as well as increased participation in decision-making and in negotiating the use of public resources;
- the inclusion and participation of all interested parties in the negotiation of the parameters of health policy;
- effective and efficient control of the NHIF on the operation of medical treatment facilities;
- an operational system of penalties for offences and malpractice by the providers of medical services;
- responsible and accountable management of health-related institutions;
- the introduction of National Health Accounts as well as standards for information collection and evidence-based decision-making;
- the introduction of additional regulations on the operation of health insurance funds;

- a change of representation for the management bodies/participants in the Representative Assembly of the NHIF and in the management of the National Health Insurance system.

Improving the health of the nation

Improving the health of the nation will be implemented through a number of national targeted programmes focusing on treatment and prevention of socially important diseases; raising public awareness on healthy lifestyles; improving the public health protection network; introducing a system of national school children monitoring; improving the conditions at children's medical and social care institutions; and developing the spa and health tourism industry. In total, the Government is targeting implementation of 25 national programmes with a total budget of BGN 18 million within the next few years.

Providing high-quality and guaranteed health services

Providing high quality of care and guaranteed health services is a priority of health reform in Bulgaria. The goals of reforms to this end include improving quality, efficiency and access to health care through a better system of health facility accreditation and development of standards for health care providers. This also requires development of a system for evaluating results and linking providers' remuneration to their performance. More government endeavours are planned in order to improve access to health care for the socially disadvantaged population.

Optimization of primary outpatient health care

Optimization of primary outpatient medical care is planned through further restructuring of provider payment mechanisms, better organization of emergency care and clearer structural differentiation between primary, outpatient specialized and dental care. In this respect, new methods will be developed for the payment of GPs, and a ceiling for the number of patients registered with one GP and the duration of GP consultations will be defined. Medical teams for primary and specialized medical care will be established in remote and inaccessible regions. In dental care more focus on prevention is on the government agenda, with the introduction of health promotion programmes.

Optimization of the health care network

More reforms are planned for health care network optimization, including better integration of inpatient and outpatient care, strengthening hospital management and fine-tuning the mechanisms of remuneration at inpatient establishments. Increased allocative efficiency can also be achieved by introducing reforms to restructure and optimize the operation of hospitals. As a result, public–private partnerships and privatization initiatives are becoming higher priorities in Bulgaria.

Future reforms aimed at optimizing the health network include: cutting down administrative barriers to facilitate increased access to medical services at different levels of the health system; shifting towards the provision of more outpatient care at the expense of inpatient care where possible; building and improving hospital information systems to improve the management of patients; the introduction of standard accounting measures in hospitals; the development of a national plan for restructuring hospitals by region; the establishment of different types of public–private partnerships for achieving greater efficiency in the management of the health care sector; and the denationalization/privatization of health care establishments with the exception of multidisciplinary active treatment university hospitals, district hospitals and national centres.

Transparent and fair drug policy

Pharmaceutical expenditure has been increasing, both as a percentage of household budgets and within the NHIF budget. As a result, Bulgaria plans to introduce reforms that restore the equity in rising pharmaceutical costs, by establishing strict control over prices, increasing patient awareness of drug policy and the correct use of drugs, and increasing the transparency of drug policy. Future reforms aimed at introducing a fair drug policy and increasing its transparency include: the establishment of printed price ceilings and the amount payable on drug packaging to defend the rights of patients; the development of IT, which will aid the monitoring of prescription drug usage patterns among health establishments; and the development of financial incentives for VHI funds to reimburse drugs which are not publicly reimbursed.

Planning, organization and development of human resources

Better planning, organization and development of human resources in the health system is required both by national interests and for EU accession. Further

reforms will be focused on better training and improving the professional qualification of health personnel in order for Bulgaria to be competitive on the EU health job market. Future reforms include better human resource enrolment in training programmes by categories and specialties depending on health system needs.

Electronic health care

As mentioned in previous chapters, electronic records in health care is a main priority for future reforms. Much has already been developed and planned towards the goal of building an integrated information exchange system between those working in the field of health care, for increased standardization and information security. Future reforms aimed at developing electronic health care in Bulgaria include: the introduction of electronic accounting for medical providers; the introduction of electronic health cards; and the introduction of software applications for real-time comprehensive processing, which includes electronic medical referrals, electronic prescriptions and other laboratory tests. With this goal in mind the Government has set aside 3.5% of the 2007 health care budget for the introduction of electronic technologies. (For more information see Subsection 5.1.3.)

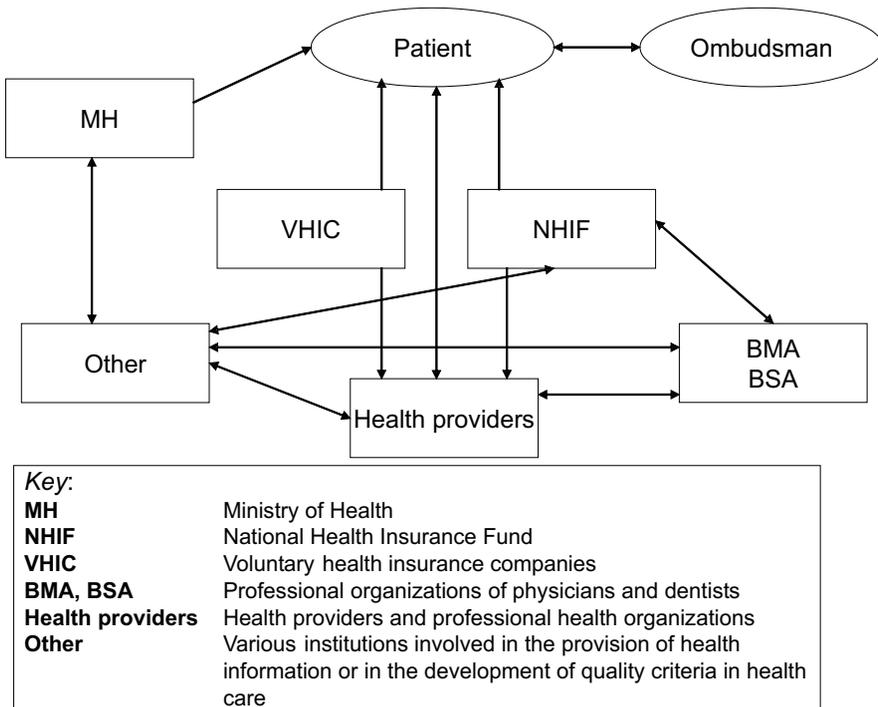
Guaranteeing the financial stability and sustainability of the national health system

The goals for guaranteeing the financial stability and sustainability of the national health system include improving the model of compulsory health insurance, ensuring the financial stability of the NHIF and encouraging the development of VHI and the introduction of regulated additional payments. The major focus will be on restructuring the system of revenue collection (tax and compulsory health insurance contributions), without increasing the financial burden on the population; mobilizing other health financing sources, increasing coverage of statutory health insurance, allowing it to bring more resources to the health sector; and having 5.5% of GDP allocated for health in 2007 and 8% by 2012. An increased effort to encourage the development of voluntary health insurance funds is planned. This will be implemented by the Government, together with promoting competition between health facilities and integrating a quality assessment system into the financial scheme for paying providers.

There are ongoing discussions of improvements to the current mechanism of negotiating the National Framework Contract. Such improvements will include strengthening patients’ involvement in negotiating the Contract through the establishment of a Union of Health Care Consumers. Health care facilities as providers are also being discussed for inclusion in negotiations, compared to the time of writing, when only the NHIF, doctors and dentists participate in negotiating the Contract. The establishment of an Ombudsman body is under consideration. It can function as a mediator and protector for the observance of citizens’ rights and legal interests in the delivery of medical services (Fig. 7.1).

There is also arguing for the rational to divide the National Framework Contract into two different types of contracts – one for the providers of medical services and one for the providers of dental services – and into a permanent and a variable sections. The permanent section (3-year contract) could include information on the National Framework Contract, the rights and obligations of all relevant interest groups and the conditions and orders for signing the

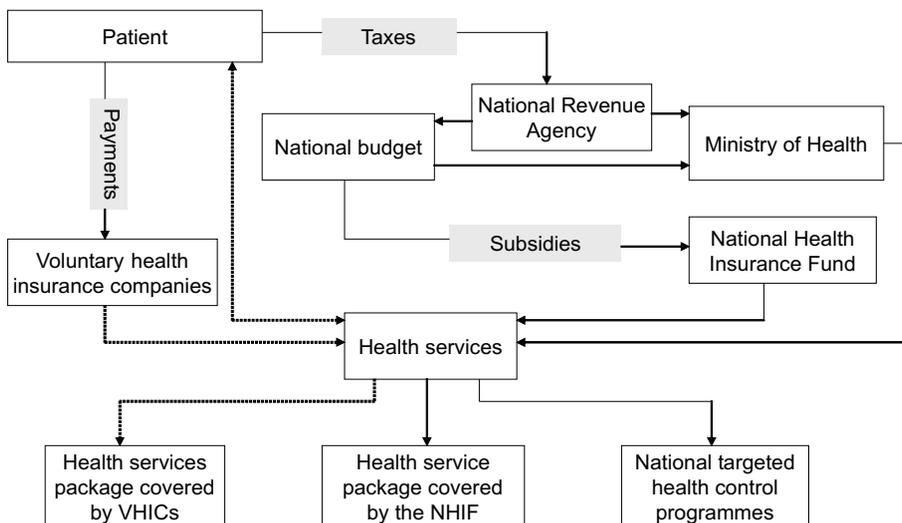
Fig. 7.1 Proposed improvements in the organization of the National Framework Contract (currently under debate)



contracts. National Framework Contract, the rights and obligations of all relevant interest groups and the conditions and orders for signing the contracts. The variable section (one-year contract) will contain the financial framework and the parameters of the health services offered (volume and price). However, these are just suggestions for the new National Health Strategy that is currently under the debate in Bulgaria. The variable section (one-year contract) will contain the financial framework and the parameters of the health services offered (volume and price).

The measures for improving the financing of the health system for both the short and the long term are also on the Government’s agenda. The measures are aimed at establishing a regulated market of health services in health facilities and eliminating informal payments for services covered under the basic benefits package. Further reforms include greater law enforcement, which would penalize doctors that take informal payments or provide negligent care; laws that would empower patients with more rights and abilities to make more informed decisions on the quality of the medical service/provider/facility; and the introduction of a case-mix approach to hospital financing through DRGs and a subsequent uniform method of calculating costs of activities and services in hospital care. The National Health Strategy 2007–2012 also lays out measures for improving the financing of the health system for both the short and the long term. The measures are aimed at establishing a regulated market of health services in health facilities and eliminating informal payments for services

Fig. 7.2 Proposed health system financing model (currently under debate)



covered under the basic benefits package. Further reforms include greater law enforcement, which would penalize doctors that take informal payments or provide negligent care; laws that would empower patients with more rights and abilities to make more informed decisions on the quality of the medical service/provider/facility; and the introduction of a case-mix approach to hospital financing through DRGs and a subsequent uniform method of calculating costs of activities and services in hospital care.

Other reform changes include the introduction of volume-based payments and the introduction of additional payments to the health system to supplement and complement the basic package of services paid by the NHIF (Fig. 7.2).

Short-term change in the health system financing model (until 2007)

Primary care services

The basic benefits package will still be covered and defined by the NHIF through the National Framework Contract. The present co-payment rate for health services will be changed by co-insurance rates of 6% of the general expense structure of specialized medical services and up to 24% for highly-specialized tests. There will be a cap on the number of patients served by a GP based on regional specifics and needs and there will also be more promotion of the concept of GPs forming group practices.

Inpatient care services

There will be legal penalties for providers charging informal payments in inpatient care or preventing access to care as a result of not receiving such payments. There will also be greater focus on patient choice and informed consent regarding treatment and provider, which will be ensured through legislation.

The health system focus will be on quality, privatization and expanding the VHI market. Voluntary health insurance funds will be encouraged to provide complementary health insurance and cover co-insurance payments for services offered as part of the basic benefits package. VHI will be one of the ways of protecting people from increasing cost-sharing rates.

Long-term change in the model (2007 onwards)

The long-term model for health system financing will be based on compulsory health insurance for all citizens, created by establishing compulsory complementary health insurance funds and strengthening the role of VHI in the system.

Risk-management mechanisms will prevent insurers from disproportional risks and the distribution of financial resources and will be adapted to the population risk profile covered by a health insurance fund. The State will be responsible for covering the expenses of health services for the socially disadvantaged. Risk restructuring will be attained either by the establishment of a risk-management institution within the system or by allowing health insurance funds to apply risk level-related individual payments within a state-accepted variable range.

In order to enforce the prevention of risk selection, additional measures will be undertaken, such as: introducing a code of ethics for VHI, publishing consumer satisfaction reports on VHICs, and regularly updating and improving the format for health payment allocation.

Each health insurance fund will be able to negotiate its own schemes and conditions with providers that allow equal access to all health services and competition between providers. The compulsory complementary health insurance funds will provide cover for basic benefits package services, including co-payments and co-insurance imposed by the statutory health system.

Based on this, the National Revenue Agency will collect income-based compulsory health insurance contributions allocated to the NHIF. The NHIF will function as a “solidarity fund” pooling and distributing resources among the health insurance funds through a pre-installed risk-management mechanism based on gender, age and disorder incidence. The NHIF will provide extra funding to funds with a less favourable demographic structure than the predefined normal structure.

Health insurance funds will strive for membership and provide the compulsory and voluntary health insurance. They will be nationally represented with a national status and the right to operate all over the country, and will compete for clients. The funds will provide to the basic benefits package with no differentiation in the size of compulsory health payments and will compete on quality. They will provide these services by signing contracts with those medical treatment facilities that meet their criteria for quality and customer satisfaction. The funds will also compete by providing complementary cover offering different health insurance packages.

The State, the NHIF and the funds (compulsory and voluntary) will provide the financing for programmes aimed at providing health care to the socially disadvantaged that, for one reason or another, are not covered by the compulsory system. (These programmes may be carried out in cooperation with external organizations, e.g. the Ministry of Labour and Social Policy).

Efficient implementation of European legislation and absorption of EU funds

Bulgaria also plans to undertake reforms to ensure the efficient implementation of European legislation and absorption of EU funds further to its joining the EU in 2007. Future reforms aimed at increasing the efficiency of implementation of European legislation and absorption of EU funds include: the need to optimize the functioning and restructuring of the hospital network using EU structural funds; the need to increase administrative capacity and use of EU funds for investment in health care; and the need to increase the training and elaboration of projects and programmes in order to be able to apply for EU structural funds in human resources and related training, for the development of regional health care infrastructure and health information systems and prevention.

Health system reform means its constant development, refining and adaptation to health needs and public developments. Health needs reflect the dynamic changes in the health of the nation to which the health system should adapt so as not to find itself in such a critical state as it has in the very recent past. This is why, after the radical changes that are taking place, the health system will move forward into the development and refinement stage.

The long-term strategy for reforms of the health sector in Bulgaria envisions the concurrent development of compulsory health insurance, compulsory complementary insurance and VHI. In order for such a vision to be realized and to be effective, the above changes have to be made as well as policy changes in the general economy. Such changes include: improved economic conditions and standard of living; a better functioning legal system; increased education; increased choice; and increased user satisfaction in the health system.

8 Assessment of the health system

The Bulgarian health system inherited at the start of transition was predominately supply-orientated and was not justified by the demand for health activities. This imbalance manifested itself in the presence of inefficient health activities and the inability for health facilities to provide high-quality medical care. There was also a curative focus, as opposed to a focus on health promotion/disease prevention, where priority was given to the hospital sector to foster the increased supply of health activities as opposed to primary health care and health prevention and promotion activities. Together with economic and currency crises in the mid- to late-1990s, Bulgaria saw a decrease in male life expectancy, a decrease in birth rates, an increase in maternal mortality, the development of an informal health sector and an increase in both out-of-pocket and informal payments for health.

Since the health care reforms implemented in the late-1990s, however, life expectancy and maternal and infant mortality have improved. The creation of a new NHIF, with a defined benefits package, has helped to define the services covered by the public sector, allowed the voluntary health sector to develop as well as helping to increase social health insurance expenditure. Recent reforms carried out to improve primary care, health promotion, quality of care, patient choice, and hospital restructuring/financing, while still at an early stage, show promise and a willingness on behalf of policy-makers to endorse health-related policy changes in Bulgaria.

However, Bulgaria's health insurance model is characterized by a number of problems, which are typical of middle-income countries. There is public dissatisfaction with the health system, exemption of certain population groups from compulsory health insurance coverage, a shortage of public financial resources, insufficient managerial capacity and health infrastructure, a sizeable informal sector and limited competition, combined with insufficient obligatory

standards and rules for good practice and insufficient information available for effective decision-making. Along with structural challenges, Bulgaria has been experiencing sociodemographic and epidemiological changes common to those found in middle- and high-income countries. Such changes include high mortality rate, decreasing birth rate, ageing of the population, domestic migration with a trend towards urbanization, emigration, and an increase in both traumatology and noncommunicable diseases.

The major challenges facing Bulgaria in the future are its need to increase universality of coverage; revenue collection mechanisms; and technical and allocative efficiency and sustainability in the health sector. Other targets for Bulgaria should be on improving quality, public satisfaction and reducing health-related costs to the fullest extent possible.

Access to health care services

Health system reforms in Bulgaria are based on the values of pluralism, democracy, accessibility, equity, solidarity and shared responsibility for health. The principles guiding health reform include the need to emphasize the social orientation, public participation and the nationwide nature of the health reform. Health policies implemented in Bulgaria are measured based on their compliance with the defined principles of health system reform. These defined principles include:

- development of a country-specific health system model, which takes into account Bulgarian history, culture, traditions, realities, interests and values;
- social orientation to the changes;
- pluralism and equity for all ownership modes in the health system (state, municipal, private and mixed);
- market mechanisms in the allocation and management of health system resources;
- free private initiative in the health system;
- distribution of the responsibilities for the health of the nation, bearing in mind consistency, continuity, transparency and public consensus for the price of change.

As a result of economic stabilization policies and the increased presence of social and health safety nets, living conditions and poverty have improved since 1997. Poverty has evolved from being a widespread transient condition to being a more concentrated phenomenon specific to certain ethnic and population subgroups. While still present, poverty is improving, together with

unemployment and national income, which will indirectly and gradually help to improve population health status and access to health services.

The establishment of a compulsory health insurance system and the government funding of socially disadvantaged groups in the population has helped to increase access to care and to restore equity in the system. However, a large proportion of the population still have suspended health insurance rights, which may have a negative impact on their access to care. The creation in 2006 of the National Revenue Agency, which collects both income tax and social health insurance contributions, aimed to help reduce the number of people with suspended health insurance rights. Other measures carried out or planned for the future to increase access to care include: an ongoing and regular update of registries and routine databases for the population; procedural action in relation to the remuneration of health care providers; patient awareness of their health insurance status; and increased funding for emergency care and population-based health care programmes.

In order to guarantee access to health services across the country, the NHIF allocates funds to the RHIFs for health insurance payments on an equitable basis (taking account of health trends, geography, population, etc.) and strives to treat all regions in a similar manner. However, inequities in access to care still exist due to the presence of informal and high out-of-pocket payments for services such as inpatient, dental and pharmaceutical care and regional disparities in infrastructure.

The high reliance on out-of-pocket payments without any form of redistribution reduces equity in the system and increases the regressive impact such payments may have for people with low incomes and for people requiring a large volume of care. The continued reliance on informal payments also disproportionately affects the poor, particularly because such payments occur in hospitals and they take up a larger share of the household budget. Owing to the lack of a regulated legal health service market, patients are often compelled to enter into informal financial relations with medical staff in order to gain access to or receive better quality of care, which is otherwise covered by the public sector. Out-of-pocket spending in Bulgaria is higher than the other selected regional countries.

In an attempt to increase access to care for at-risk populations, Bulgaria has implemented targeted programmes and policies for ethnic groups such as the Roma community and people in rural areas, which has been documented to be a cost-effective way of increasing access to care (44). Legislation has also been recently enacted to ensure patients' rights to access the health system. However, the success of such programmes has been limited to some extent due to the presence of regional disparities in human resources and health infrastructure

and the lack of adequate roads and communications in rural areas. Regional and infrastructural disparities also exist for access to prenatal and emergency care, which is reflected in the disparities of infant mortality rates between rural and urban regions. Choice of GP is also limited by regional disparities. In rural areas there is often only a single GP providing services to the population. This limits the ability of a patient to choose a GP and to obtain a second opinion, even though they are entitled to such rights (39). Some studies also suggest that different socioeconomic groups access different facilities at different levels of the system. People with low socioeconomic status were found to access less care and are also more likely to remain at the lowest tier of the system and face lower levels of quality (45).

The NHIF's challenges with regard to improving access to care are the need to optimize payment mechanisms and conduct financial and statistical analyses for obtaining more sustainable financial outcomes, together with the need for more favourable economic, demographic, infrastructural and educational improvements in the country. Some innovative ways to increase access to care include: increased regulation of the State's participation in the funding of the basic package of health services for at-risk groups; the establishment of polyclinics and emergency care centres where hospitals are nonexistent or ineffectively functioning; better regulation of the legal health service market to decrease informal payments for hospital services, targeted subsidies to the NHIF for the payment of medical services for the socially disadvantaged; and better information gathering and database management on risk factors that may not have been studied or monitored in a long time.

Efficiency of resource allocation in health care

The general direction of the resource allocation component of reforms has been toward new provider payment mechanisms, greater autonomy of hospitals, decentralization in health care administration, recognition of patient choice and a reduction in resource infrastructure. Much progress has been made in these areas. Both the number of excess hospital beds and hospital length of stay have been decreasing concurrent with an increase in hospital admissions. However, the number of hospitals in the country is still high and increasing. There were 257 hospitals in 2004 for a population of only 7.7 million, which is high for European standards.

Previously unfamiliar concepts like general medicine, health insurance, health promotion and family planning have now made major advances in the health system. The long-term, rehabilitative, palliative and mental health care sectors are starting to be developed in the country and there has been a shift away from inpatient beds towards more beds for rehabilitation. However, many

of these trends have been very recent. Mental health care reform started in 2001 and was revised in 2004. Regulations of palliative care were introduced in 2005 and there is a great demand for increased palliative care services and hospices in the country.

Further improvements in increasing the efficiency of resource allocation can be made in optimizing health service structure and organization. The availability of increased and uniformed information across agencies on the population, infrastructure, health status and human resources can help to make changes in the National Health Map and better reflect demographic, infrastructure and disease trends. Reforms planned for the creation of a new uniform database, a system of National Health Accounts and electronic health cards will make improvements for decision- and policy-making in this respect.

While achievements in human resource training and planning have been made, there is still a tendency towards specialization among medical doctors and while the number of nurses is increasing, Bulgaria still has one of the lowest levels of nurses and pharmacists and one of the highest levels of dentists in Europe and the Region. Regional disparities in health personnel and health care resources are also present, with more health personnel and better facilities in urban areas, compared to rural locations. The health care establishments are also lacking efficient management skills, occupancy rates are rather low and the planning of service volumes and costs is inadequate (39).

Developing the appropriate balance between the private and public sectors has been another challenge undertaken by the Bulgarian Government in recent years. Privatization reform and development of VHI have so far been slow; however, this is predicted to increase in the coming years. Promoting the development of the private sector might be a good means of raising additional funds for the health sector and could provide hospitals with more funds for the improvement of their facilities. Strengthened VHI will allow a reduction in the regressive impact of out-of-pocket payments, as insurance premiums can be spread over a wide population base and can also work towards increasing the quality of the health services offered. However, in order for such a scenario to work, Bulgaria will have to ensure that adequate mechanisms are in place to ensure access to good quality of care if there is to be increased privatization and competition in the market.

The upcoming 2007 Health Insurance Code is aimed at helping to align legislation between the public and private sector and particularly between the NHIF and the VHI market. A better-defined basic benefits package will allow the NHIF to reduce costs. Other changes that would improve the development of the VHI market include reducing the widespread existence of informal payments, introducing more tax incentives for companies to enrol employees

in VHI, and increasing the incomes of Bulgarian citizens so that VHI can be more affordable.

Technical efficiency in the production of health care

Bulgaria has made significant progress in undertaking a series of reforms to increase accountability for health establishment owners in the health system by means of methods such as introducing market mechanisms in outpatient medical care, refining stable financing mechanisms and introducing greater accountability for managing hospital debt. These aims have been achieved through greater governmental control of hospital debts and expenditure, the dismissal of ineffective hospital directors and establishing financial discipline through the creation of a board. The creation of the National Revenue Agency, a move backed by the IMF and the World Bank to help Bulgaria increase revenue collection and better monitor the sectors of the population with health insurance rights that are not functioning properly, was also an attempt to create greater technical efficiency in the production of health care. However, the operational costs of the health insurance system still remain relatively high, as there are not only problems in revenue collection due to inadequate infrastructure and management capacity, but also revenue collection problems due to the large informal sector, unemployment and large proportion of the population involved in agricultural trade.

The need to search for alternative sources of revenue has also inspired other policy changes, such as the proposed increase in the health care contribution rate from 6% to 8% of taxable income, due to be effective in 2007. This is similar to what the new Health Strategy 2007–2012 is calling for when it recommends focusing on discipline, on mechanisms for the efficient distribution of the available funds and on trying to collect overdue health payments from employers.

However, most of these policy changes have been examining alternative ways to finance the health system and not concentrating so much on the structural problems that the hospital sector currently faces. These are problems that increased financing may not fix. As a result, most of the reforms mentioned have resulted in reduced salaries of medical staff, poor quality of medical services and increased costs for people paying health contributions, with no real improvement in services. In addition, hospitals have not really tackled issues such as optimizing expenses, selling unused buildings, converting into other establishments and cutting unnecessary staff. Owing to weak, or even missing, controls in the system, and unbalanced rights and obligations for the hospital

directors, hospital debts have been steadily increasing as hospital managers have a clear understanding that at the end of every budget year they are covered by the State. The reform introduced no incentive for hospitals to be efficient, as ultimately, there is no accountability. Most of the hospital debts are debts to suppliers, mainly pharmaceutical distributors.

The lack of incentives for good management, the weak market and the exclusion from the Commercial Law of the opportunity for insolvency of health care establishments still create conditions for inappropriate distribution of funds within the hospitals.

In 2005, health institutions amassed BGN 156 million in debt (€79.9 million), BGN 72 million (€40.5 million) of which is already due. Part of the reason is weak, or even missing, controls in the system and a lack of accountability and experience, as explained earlier. Another reason is the unbalanced rights and obligations for health directors. While doctors and dentists participate in negotiating the National Framework Contract, hospital interests and costs are not taken into account during such sessions. Also, all hospitals are reimbursed the same amount based on treatment, which does not take account of factors such as quality of care rendered, costs of care, severity of disease treatment and/or age and type of diagnostic medical equipment used. This tends to lead to hospitals performing at a higher cost being in more debt than others, depending on their costs and/or the patient pool they treat.

The Health Strategy 2007–2012 attempts to address such problems by proposing the addition of a union representing patients' interests and another group representing the interests of health institutions during the drafting of the National Framework Contract; the introduction of a DRG system for funding hospital services by the NHIF, which takes account of the severity of cases, co-morbidities, the quality of financial management and control, innovative technologies and minimization of invasive methods; and funds from the Ministry of Health for national priority programmes and/or hospital-developed projects for the improvement of the quality of medical services.

Bulgaria's current plans to increase technical efficiency are both on target and comprehensive in nature. Such plans include increased focus on the GP gatekeeping role, ongoing check-ups and direct controlling functions of hospitals, reducing administrative costs as much as possible, and experimenting with and fine-tuning the current system of mixed-source financing for primary and specialized outpatient care, with increased financial incentives for preventative care.

Quality of care

As mentioned in previous chapters, the quality of medical care still remains one of the most significant health care delivery problems and it is also one of the most difficult to analyse due to the lack of quality monitoring in Bulgaria. There is currently no quality management system which encompasses quality criteria and standards, quality assurance, medical protocols and/or reference quality overviews. As a result development is lagging behind in a range of areas, including quality management from the perspective of the quality of contracts; the monitoring of services used; control over expenditure; and fraud prevention.

While this is true on a grand scale, Bulgaria has been attempting to improve the quality of care since the start of the health reforms. Various reforms have been undertaken in an attempt to increase the care rendered by health care professionals, such as the introduction of financial incentives for providing better care, the creation of new responsibilities for existing agencies to control and monitor care, and better training for health and allied health professionals.

Payment of health personnel is now performance-based. Better training and continuing medical education as a lifelong concept have also been introduced and this is now in line with EU standards and regulations. The 2004 Health Act provided the measure for the establishment of a health registry for professionals to be developed at Ministry of Health level and for the introduction of medical standards for certain professions. The Health Act also gave the 28 regional health centres increased responsibility to control medical specialties. However, more reforms are still needed in the field, as the laws are currently still fragmented and in need of continual refinement.

There are also disparities in health care quality between rural and urban areas. The quality of health services in rural areas is rather low in comparison to urban areas, owing to the lack of efficient communication lines, equipment and the condition of hospitals.

The future reforms will include improvements that can be made to enhance quality, in particular: introducing more licensing for specialized medical services; the establishment of an independent Quality Agency, which can develop national standards of clinical management by disorders and can conduct pharmaco-economic analyses and health technology assessment; as well as giving patients more empowerment for reporting quality improvements and publishing feedback on their experiences. However, the content of these reforms is still under development and discussion.

With regard to health institutions, hospital accreditation by the Accreditation Council at the Ministry of Health was introduced in 2003 and some hospitals

have the ISO 2001:2000 international certificate. However, such initiatives have not been as successful and well received owing to the fact that there are currently no real incentives for rewarding high-quality care, as the accreditation system is not linked to differential payments from the NHIF, which in certain circumstances may decrease the incentives for providing the best care for the patient. An enhanced linkage of financial incentives to quality rendered can motivate hospitals to provide better quality of care and can also reward in a more equitable manner hospitals that are currently providing high-quality care. While financial improvements can be made on linking funding to quality of medical services, on the provider side, financial incentives to provide high-quality care can push health establishments to institutionalize activities related to quality and control that occur in their facilities as well as incentivize them to develop criteria for the evaluation of health providers in terms of the quality of care they provide.

The contribution of the health system to health improvement

The health reforms undertaken at the end of the 1990s have brought significant improvements to the health care sector. As mentioned earlier, life expectancy has increased and standardized death rates, maternal and infant mortality have been decreasing throughout the 2000s. However, it is unclear how much of an impact the health sector reform alone has made on these improvements, as there have also been concomitant increases in economic and social living conditions. Most health reforms currently undertaken are still at an early stage, so it is difficult to objectively assess the impact on the health status of the population. Such reforms are also intended to improve health status over the longer term, as they assure better primary care, encourage preventive and health promotion activities, especially for children and women of reproductive age, and assure better care for elderly people.

Health outcomes, while still below European outcome standards, have been improving in Bulgaria and, for many indicators, have surpassed pre-transition levels. Mostly this is due to current health policies based on population health needs. Efforts are directed towards increasing the awareness of the population to be responsible for their own health. While smoking and alcohol consumption are at below-average levels for Europe, Bulgaria has a high level of disability compared to EU countries. There is also a high incidence of high blood pressure, particularly amongst younger groups, as well as of obesity, which suggests that a greater focus on preventive care as well as the creation of incentives for lifestyle improvements can improve population-based health indicators. Based on this assessment, future changes in health system reform should include the points discussed below.

- Universal population coverage, where each citizen is part of the health system and appropriate treatment and health care are ensured to all who may need them.
- Freedom of choice concerning the supplier of medical services and ensuring patients' rights to choose their medical treatment facilities and their physicians according to their own preferences.
- Effectiveness and accountability and ensuring maximum health results for society at a certain resource level.

In order to ensure that future reforms increase health outcomes, this continued link between health system objectives and the achievement of health gains has to be made. Bulgaria must continually monitor and evaluate the effectiveness of programmes and strategies that have been implemented in the health sector and continue those which have been proven to be effective.

9 Conclusions

The Bulgarian health system remained on the periphery of the country's public sector reforms until the late 1990s. The system appeared to be maintaining itself and there were other political priorities, given the catastrophic state of the Bulgarian economy. 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 system became obvious.

The population was overloaded with unregulated payments and a black market for health care services had started to appear. A step-by-step approach to reform was adopted during the years of economic crisis. The Ministry of Health adopted a strategy for reform based on the principles of equity, cost-effectiveness and quality of care. An increasing volume of information had been collected since 1992 and much technical and financial help was received from international donors. Staff (medical, administrative, paramedical) are being trained to manage these reforms. The general principles, and the philosophy of previously unfamiliar concepts like general medicine, health insurance, health promotion and family planning, have now made major advances in the health system.

The first step was the adoption of the Health Insurance Act in 1998. A second Act, effective since 1998, established professional organizations of doctors and dentists (a medical chamber). A third pillar of reform was the 1999 Health Care Establishments Act, which outlined changes in the structure of the health system. These laws laid the foundations for a drastic transformation of the financing and delivery dimensions of the health system over a relatively short time.

Undoubtedly, the reforms are ushering in a period during which certain efficiency gains can be made. Already, it is possible to see signs of this trend in the sizeable reduction in hospital bed numbers and resultant cost savings. These gains are likely to continue in the foreseeable future. Further, the operation of

the new insurance-based financing system is expected to increase efficiencies while also helping to mobilize funds for the health sector. New hospital payment methods involving volume-based case payments will accelerate this process.

Patient choice of GP (family doctor) has been permitted. This is one feature of reform that has met with patient approval, although strict enforcement of referrals for higher levels of care has encountered some resistance as it limits patient choice. Consumer choice has also been extended through the expansion of privately provided services. It is likely that there have been serious negative impacts on access to services and pharmaceuticals due to the lack of affordable care. This issue requires particular attention, especially for vulnerable groups. Moreover, some of these groups are more likely to remain uninsured by the NHIF and therefore excluded from coverage.

As the health care reform proceeds, it is of utmost importance that the objectives in the health system remain linked with the achievement of health gains. At this early stage of the reform process, it is difficult to assess the impact on the health status of the population, as the reforms are intended to improve health status in the longer term and assure better care for elderly people.

Although it is possible to detect some nostalgia for the older system of “free” health care, there is now broad recognition of the necessity for reform and that an irreversible process of change has been set in motion. Although based on what is generally perceived to be, in principle, a “good idea”, this has not been matched by appropriate financial and technical resources. In order to increase public support for the reform process, it is now necessary that the Government will focus on fine-tuning the major changes introduced in very recent years, and on ensuring better-quality care delivery.

10 Appendices

10.1 References

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10.2 HiT methodology and production process

The Health Systems in Transition (HiT) profiles are produced by country experts in collaboration with the Observatory's research directors and staff. The profiles are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources, and examples needed to compile HiTs. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: http://www.euro.who.int/observatory/Hits/20020525_1.

Authors draw on multiple data sources for the compilation of HiT profiles, ranging from national statistics, national and regional policy documents, and published literature. Furthermore, international data sources may be incorporated, such as those of the Organisation for Economic Co-operation and Development (OECD) and the World Bank. OECD Health Data contain over 1200 indicators for the 30 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All (HFA) database. The HFA database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health

for All policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard HFA data have been officially approved by national governments. With its summer 2004 edition, the HFA database started to take account of the enlarged European Union (EU) of 25 Member States.

HiT authors are encouraged to discuss the data in the text in detail, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT profile consists of ten chapters:

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.
2. Organizational structure: provides an overview of how the health system in a country is organized and outlines the main actors and their decision-making powers; discusses the historical background for the system; and describes the level of patient empowerment in the areas of information, rights, choice, complaints procedures, safety and involvement.
3. Financing: provides information on the level of expenditure, who is covered, what benefits are covered, the sources of health care finance, how resources are pooled and allocated, the main areas of expenditure, and how providers are paid.
4. Planning and regulation: addresses the process of policy development, establishing goals and priorities; deals with questions about relationships between institutional actors, with specific emphasis on their role in regulation and what aspects are subject to regulation; and describes the process of health technology assessment and research and development.
5. Physical and human resources: deals with the planning and distribution of infrastructure and capital stock; the context in which information technology (IT) systems operate; and human resource input into the health system, including information on registration, training, trends and career paths.
6. Provision of services: concentrates on patient flows, organization and delivery of services, addressing public health, primary and secondary health care, emergency and day care, rehabilitation, pharmaceutical care, long-term care, services for informal carers, palliative care, mental health

- care, dental care, complementary and alternative medicine, and health care for specific populations.
7. Principal health care reforms: reviews reforms, policies and organizational changes that have had a substantial impact on health care.
 8. Assessment of the health system: provides an assessment based on the stated objectives of the health system, the distribution of costs and benefits across the population, efficiency of resource allocation, technical efficiency in health care production, quality of care, and contribution of health care to health improvement.
 9. Conclusions: highlights the lessons learned from health system changes; summarizes remaining challenges and future prospects.
 10. Appendices: includes references, useful web sites, legislation.

Producing a HiT is a complex process. It involves:

- writing and editing the report, often in multiple iterations;
- external review by (inter)national experts and the country's Ministry of Health – the authors are supposed to consider comments provided by the Ministry of Health, but not necessarily include them in the final version;
- external review by the editors and international multidisciplinary editorial board;
- finalizing the profile, including the stages of copy-editing and typesetting;
- dissemination (hard copies, electronic publication, translations and launches).

The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

The Health Systems in Transition profiles

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country profiles provide an analytical description of each health care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the European Region 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;
- to describe accurately the process, content and implementation of health care reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- to 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 countries of the WHO European Region.

How to obtain a HiT

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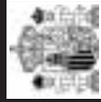
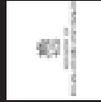
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Key

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- ^a Albanian
- ^b Bulgarian
- ^c French
- ^d Georgian
- ^e German
- ^f Romanian
- ^g Russian
- ^h Spanish
- ⁱ Turkish
- ^j Estonian
- ^k Armenian
- ^l Polish



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