

Health Systems in Transition

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Romania

Health system review

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Romania: Health System Review

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Preface

The Health Systems in Transition (HiT) 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.

The HiT 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; 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 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. Because there is no uniform data source, quantitative data on health services are based on a number of different sources, including the

World Health Organization (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 does also offer advantages, because it raises similar issues and questions. The HiT 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 a continuing initiative and material is updated at regular intervals. Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to: info@obs.euro.who.int.

HiT profiles and HiT 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 www.euro.who.int/observatory/Glossary/Toppage.

The data used in this report reflect information available at November 2007.

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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, Greece, Norway, 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 is led by Josep Figueras, Director, and Elias Mossialos, Co-director, and by Martin McKee, Richard Saltman and Reinhard Busse, heads of the research hubs. Jonathan North managed the production of the profile, with the support of Jane Ward (copy-editing) and Martyn Barr (layout).

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List of abbreviations and acronyms

CEEC	Central and Eastern European countries
CoPh	College of Physicians
DHIF	District Health Insurance Fund
DPHA*	District Public Health Authority
DRG	Diagnostic-related group
ECU	European currency unit (unit of account in EC before being replaced by the euro)
EU	European Union
FDI	Foreign direct investment
GP	General practitioner
INN	International non-proprietary name
NHIF	National Health Insurance Fund
NGO	Nongovernmental organization
UNDP	United Nations Development Programme

* The Health Reform Law 95/2006 renamed the District Public Health Directorates as District Public Health Authorities (DPHA).

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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.

Romania has gone through a period of rapid and major change in every sector, including health, since the revolution of 1989. Demographic trends since 1989 show continual population decline caused by emigration, a falling birth rate and a rise in mortality. Health status in Romania is poor compared with the other European countries: average life expectancy is six years shorter than the EU average, and infant and maternal mortality are among the highest in the European Region. Major reforms began in 1989 and by 1998 the previous centralized, tax-based system had been transformed into a decentralized and pluralistic social health insurance system (administrated and regulated by the National Health Insurance Fund) with contractual relationships between purchasers, the health insurance funds and health care providers. The benefits package and the conditions for service delivery are laid out in the yearly framework contract. Payment for services is shifting away from funding based on input costs: primary care services are paid for by a mix of age-weighted per capita budgets (85%) and fee for service (15%); acute care hospitals receive prospective payments consisting of a mix of case-based payment and fee for service; and long-term care hospitals are paid for mostly through budgets. Current reforms (e.g. the Health Reform Law 2006) focus mainly on the continuation of the decentralization process, the development of the private sector and the establishment of clear relations between the systems of health and social care.

Executive summary

Romania has gone through a period of rapid and major change in every sector since the revolution of 1989. Before this revolution, Romania was a communist country. In December 1989, the political system moved towards a democracy and Romania became a republic, led by a president and governed by a two-chamber parliament (the Senate and the Chamber of Deputies), both elected for four-year terms. At present, following the December 2004 general elections, there are six political parties in parliament, with some seats dedicated to the representatives of national minorities such as Roma, Ukrainians and Italians. The Hungarian minority, the largest in the country, is represented in the parliament by one party.

Demographic trends since 1989 show continual population decline: the population declined by 5% between 1992 and 2006, from 22.81 million inhabitants to 21.58 million. The reduction was caused by emigration, a fall in the birth rate and a rise in mortality. Health status in Romania is poor compared with the other European countries. The average life expectancy in Romania was 72.7 years in 2006 (69.2 years for men and 76.2 years for women), six years shorter than the European Union (EU) average (78.5 years in 2005) and seven years shorter than the average for the EU Member States prior to May 2004 (79.7 years in 2005). Infant and maternal mortalities are among the highest in the European Region despite a large decline in maternal mortality since 1990. In 2006, there were 13.91 infant deaths per 100 000 live births, and 15.49 maternal deaths per 100 000 live births. Overall, in Romania, the most important causes of death are cardiovascular diseases (62.1% of all deaths in 2006), cancer (17.6%), digestive diseases (5.5%), accidents, injuries and poisoning (4.9%) and respiratory diseases (4.9%). Romania has one of the highest levels of cardiovascular disease in the European Region.

For four decades, from 1949 to 1989, Romania had a Semashko health system. Major reforms began in 1989 and by 1998 the centralized, tax-based system had been transformed into a decentralized and pluralistic social health insurance system with contractual relationships between purchasers, the health insurance funds and health care providers. The Health Insurance Law issued in 1997 has already been modified several times, being continuously adapted to the changing political, social and economic context. The current reforms are focused mainly on the continuation of the decentralization process, the focus on prevention and primary health care, the enhancement of the provision of a minimum package of services through more effective emergency services, the development of the private sector and the establishment of clear relations between the systems of health and social care. These directions of reform have been facilitated by the introduction of the Health Reform Law in May 2006.

Following the implementation of mandatory social health insurance in 1998, the roles of the main actors in the health system have changed. The Ministry of Public Health no longer has direct control over the financing of a large part of the network of providers. Its main responsibilities consist of developing national health policy, regulating the health sector, setting organizational and functional standards, and improving public health. The representative bodies of the Ministry of Public Health at the district level are the 42 district public health authorities (DPHAs). The health insurance system is administrated and regulated by the National Health Insurance Fund (NHIF), a central quasi- autonomous body. At district level there are 42 District Health Insurance Funds (DHIFs) responsible for contracting services from public and private providers. There are also two countrywide insurance funds established in 2002, one belonging to the Ministry of Transport and the other to the Ministries of Defence, Justice and Interior and the agencies related to national security. Between 1999 and 2002, the DHIFs were responsible for raising social health insurance contributions locally from employers and employees working in the respective district. They retained and used 75% of collected funds, 25% being sent to the NHIF for redistribution. Since 2002, the contributions have been collected at the national level by a special body under the Ministry of Finance (the Fiscal Administration National Agency), and DHIFs have raised contributions only from insured persons paying the whole contribution (such as the self-employed).

The insured population is entitled to receive a basic benefits package that includes health services, pharmaceuticals and medical devices. The benefits package and the conditions for service delivery are laid out in the yearly framework contract elaborated by the NHIF, agreed by the Ministry of Public Health and approved by the government. The norms for implementing the contract are approved by a common order of the NHIF and the Ministry of Public Health. Patient rights are protected by the Law on Patient Rights issued

in 2003. The current legislation also assures free choice of provider for the patient, increasing patient participation in decision-making, patient safety and compensation measures.

Total health expenditure is difficult to measure because records of private expenditure are incomplete (especially direct payments charged by private providers and under-the-table payments in the public sector). The available data suggest that from 2000 to 2005 the share of gross domestic product spent on health had increased from 4.1% to 4.4%. Despite this increase, spending remains considerably lower than in most EU countries.

In 1998, health insurance became the main contribution mechanism to finance health care with a constantly increasing share, from 64.6% in 1998 to 82.7% in 2004. The working population pays a 6.5% payroll tax and the employer another 7%; the self-employed also pay a 7% contribution to the health insurance fund.

The mandatory health insurance scheme covers the whole population. Some categories are exempt from insurance contributions: unemployed, persons doing military service or in penitentiaries, persons on sickness or maternity leave, persons entitled to social security benefits, children under 18 years, persons aged 18–26 years enrolled in any form of education, family members of an insured person, persons persecuted by the communist regime or declared heroes in 1989 Revolution and war veterans. Law 346/2002 established the National Insurance Fund for Work Accidents and Occupational Diseases. It is funded mainly by contributions paid by employers, the self-employed, persons who gain income from independent activities, persons working for international organizations and persons working in agriculture or forestry. As well as medical care for occupational diseases and work accidents, this fund also pays sickness allowances during periods of temporary incapacity. The Health Reform Law (95/2006) offers the legislative framework for private insurance companies, which are permitted to offer two types of voluntary health insurance: supplementary and complementary.

Taxes continue to be an important contribution mechanism to finance health care (15.8% in 2004) as the state budget retains responsibility for funding public health services, capital investments, preventive activities and some treatments under the national health programmes. Other sources of health financing are out-of-pocket payments (for services that are not included in the health insurance benefit packages or covered by the Ministry of Public Health), external financing and donations. In 2006, a new tax on cigarettes and alcohol was introduced at the request of the Ministry of Public Health. Substantial funds were collected and an important share is used by the Ministry of Public Health for the first time

on important national health programmes (health promotion and prevention) and capital investment.

Decisions on resource allocations for the health sector typically result from an annual political process in which parliament determines the share of the state budget earmarked for recurrent and capital expenditure in the health sector. The overall public health budget (including the NHIF budget) is annually set by the government and approved by the parliament through the Budget State Law. The Ministry of Public Health is responsible for administering the state health budget. State funding for health is earmarked for specific purposes before distribution to the Ministry of Public Health and to the other ministries with health networks. Funds that are allocated to one spending category cannot be transferred to another. The Ministry of Public Health allocates funds for public health activities to the DPHAs and to its subordinated units, mainly on an historical basis. The money allocated to the national public health programmes is distributed to different institutions according to their responsibilities in programme implementation. Capital investment projects are decided at Ministry of Public Health level on the basis of proposals submitted by districts.

The NHIF allocates funds to the DHIFs in accordance with a formula based on the number of insured persons and population risks. The government sets the spending level for each health care sector (primary health care, hospitals, drugs and ambulatory services). Payment for services is shifting away from funding based on input costs. Primary care services are paid for by a mix of age-weighted per capita budgets (85%) and fee for service (15%). The services provided by specialists in ambulatory settings, including dental care services (for adult-only emergencies and yearly prophylactic check-ups) and home care services are paid as a fee for service. Acute hospitals receive prospective payments consisting of a mix of case-based payment and fee for service, while hospitals providing long-term care are paid for mostly through budgets. The current system of paying hospitals based on diagnostic-related group (DRG) has not yet been evaluated. Hospitals can also charge direct payments for high-comfort accommodation.

A reference price system is in place for pharmaceuticals in which patients pay the difference between the actual and the reference price of drugs prescribed in ambulatory services. There are two lists of drugs where co-insurance is required (a percentage of the reference price): one with 10% co-payment covering most effective, inexpensive and generic drugs; and a second with 50% co-payment including mainly brand drugs along with more expensive generics. The cost-sharing arrangements were explicitly introduced to encourage the use of generics and to contain costs. Drugs dedicated to patients suffering from certain diseases considered public health problems (such as tuberculosis,

diabetes, and human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)) are free of any cost sharing, being fully covered by the health insurance fund.

Primary health care services are provided by approximately 10 000 family doctors. They are independent practitioners in contractual relationship with DHIFs. Ambulatory secondary care is delivered through a network of hospital outpatient departments, centres for diagnosis and treatment and office-based specialists.

Romania has a relatively high inpatient admission rate, reflecting not only the low efficiency and underutilization of primary and ambulatory care services but also the fragmentation of services and insufficient development of different levels of care, including integrated medical and social care providers, since many patients are hospitalized for social rather than medical reasons. Hospitals are organized on geographical criteria at the regional, district and local level. Tertiary care is provided in specialized units (specialized hospitals, institutes and clinical centres) and a number of cardiovascular and other surgery departments in teaching hospitals. Inpatient care is also provided by long-term care hospitals (for patients with chronic diseases who require long-term hospitalization), medicosocial care units (institutions under local authorities that provide both medical and social care), sanatoriums (units that besides usual treatments provide natural therapies) and health centres (inpatient units that assure medical services for at least two specialties). In 2004, Romania had approximately 6.5 hospital beds per 1000 population, while for acute care beds only the ratio is 4.4 per 1000 population.

Health care reform after 1989 focused on primary health care and health care financing, the latter centred around the introduction of the health insurance system. The main objectives of the Ministry of Public Health immediately after 1989 were to avoid dismantling the health care system, enhance the primary health care sector, decentralize, improve health care financing and build managerial capacity among health care directors. The central concerns were not to rush to give up the existing policies and also not to reject prior achievements solely based on their association with the communist era.

Between 1992 and 1994, there was an initial piloting of different payment mechanisms and decentralization plans in four districts, carried out through a World Bank project. In 1994, a pilot health reform was implemented in Romania in 8 of 41 districts (covering four million people) introducing changes in the provision and payment of general practitioner services. The pilot continued until 1997, when it was stopped by the new government in order to introduce the health insurance scheme. While the Social Health Insurance bill was

approved by the Senate in 1994 and by the Chamber of Deputies in mid 1997, its implementation started only in 1999.

All changes introduced by the health care reforms aimed at attaining the major objectives common to most countries: universal and fair access to a reasonable package of health services, control of costs of health services and efficient delivery and allocation of resources. To date, the objectives have not been reached, due to the scarcity of resources, lack of experience and ongoing changes in the political and economic environment. This is motivating the continuation of health reforms. The main changes that have taken place so far (changing of funding system, purchaser–provider split, decentralization, introduction of market mechanisms) set the basis and the direction for future reforms. The government elected in 2005 has enacted health care reforms that have specific aims: to ensure and guarantee compliance with the principles of social health insurance (solidarity, universal coverage and autonomy), encourage the development of a private health insurance system, stimulate the privatization of the infrastructure of medical institutions, encourage competition between providers, continue the decentralization process, assure adequate financing of the health system, and diminish inequities and corruption within the medical system (Health Reform Law 95/2006).

The latest developments suggest that health has finally gained a place on the government's priority list and that the Romanian Government has finally understood its stewardship role for the health system. Moreover, because of the European Union accession process, Romania has been required to harmonize legislation with European Union requirements. However, there still is a gap between the legal developments and actual implementation on the ground, mainly a result of poor administrative capacity, lack of accountability mechanisms at the local level, inadequate communication between public institutions and insufficient management skills among elected officials at the local level and administrative personnel. Challenges to reform the hospital sector as well the mental health care system remain on the agenda of the government, with their main objective to reach a modernized, integrated and better performing health system.

1 Introduction

1.1 Geography and sociodemography

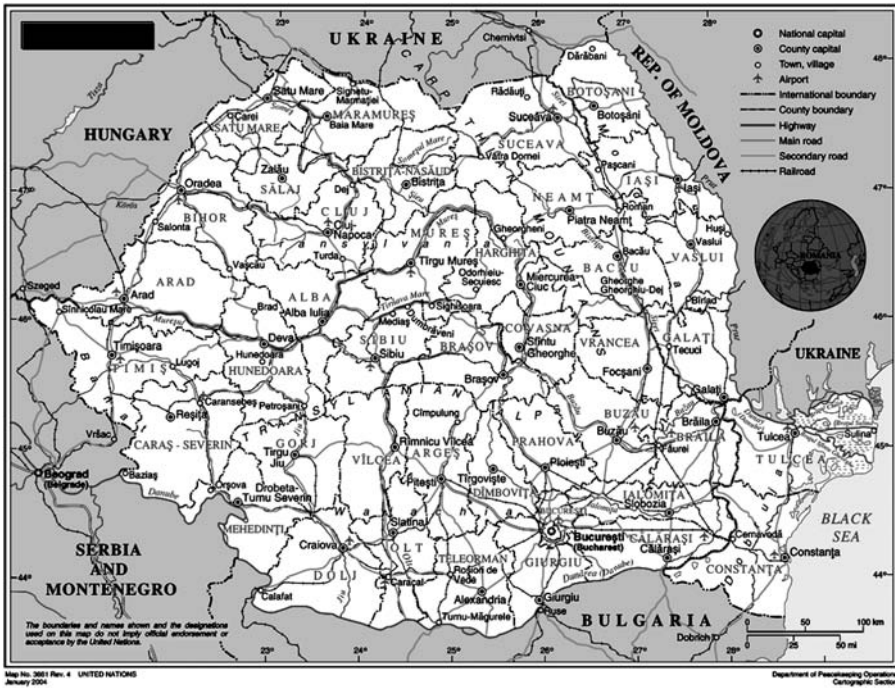
Romania is situated in the south-eastern part of central Europe, with the Carpathian Mountains to the north and the Danube on its southern border exiting to the Black Sea (Fig. 1.1). The Romanian coast of the Black Sea stretches 245 km, enabling connections with the countries in the Black Sea basin and the Mediterranean basin. It is also bordered by Moldova to the east, Ukraine to the north, Hungary and Serbia to the west and Bulgaria to the south.

Romania covers an area of 237 500 km². Its terrain lies on three main levels, each constituting about a third of the total area: the highest level is the Carpathians (highest peak, 2544 m, is Moldoveanu); the middle level corresponds to the sub-Carpathians, the hills and the plateaus; and the lowest level, containing the plains, meadows and the Danube Delta.

Romania's climate is temperate. The average annual temperature ranges from 8°C in the north to 11°C in the south and from -2.5°C in the mountains (Omu peak, Bucegi massif) to 11.6°C in the plains (Zimnicea town, Teleorman county). Yearly precipitation decreases in intensity from west to east: 500–600 mm in the Romanian Plain, under 400 mm in Dobrogea, and 1000–1400 mm in the mountainous areas.

Population estimates from 2006 revealed 21.58 million inhabitants, representing a 5.4% reduction from 1992 (Table 1.1). This population decline corresponded with a decline in fertility and birth rates and an increase in the death rate (Table 1.1). In 2006, the female population constituted 51.3% of the total population and the proportion of the population aged 0–14 years was 15.4%, while those aged 65 years and older represented 14.7% of the total population. Annual population growth has been negative: -2.8/1000 inhabitants in 2002, the

Fig. 1.1 Map of Romania



Source: United Nations Cartographic Section

lowest since 1989. The value remained negative but there was a trend to decrease the size of this negative value. In 2006, the population growth recorded was $-1.8/1000$ inhabitants (Ministry of Public Health, 2007a). Population density fell from $95.7/\text{km}^2$ in 1992 to $90.5/\text{km}^2$ in 2006. The capital city, Bucharest, is the largest city, with a population of 2.34 million in 1992. The population here also decreased, to 2 million in 2003 and 1.92 million in 2004, remaining about the same as that on 1 July 2005 (estimates of the National Institute of Statistics). The urban population was 55.1% in 2006 (Table 1.2).

The population is made up of 89.5% people of Romanian origin, 7.1% Hungarian, 1.8% Roma and 1.7% other nationalities. The official language is Romanian, but other languages are spoken. According to the 2002 census (the most recent census), the majority declared their religion as Orthodox (86.7%), with 5.1% Roman-Catholic, 3.5% Protestant, 1% Greek-Orthodox and 3.6% belonged to other religions. That same year, 99.8% of the total population declared having a specific religious belief, while only 0.1% reported being

Table 1.1 Population/demographic indicators, 1948–2006

	1948	1956	1966	1977	1992	2002	2006
Total population (millions)	15.87	17.49	19.10	21.55	22.81	21.69	21.58
Women (% of population)	51.7	51.4	51.0	50.7	50.9	51.2	51.3
Population aged 0–14 (% of total)	–	27.5*	26.0*	25.4	22.4	17.4	15.44
Population aged 65 and above (% of total)	–	6.3*	7.9*	9.7	11.1	14.0	14.68
Population density	66.6	73.4	80.1	90.4	95.7	90.9	90.52
Fertility rate (births per woman)	–	–	–	–	1.5	1.3	1.3
Birth rate (per 1000)	23.9 ^a	24.2 ^a	14.3	19.6	11.4	9.7	10.2
Death rate (per 1000)	15.6 ^a	9.9 ^a	8.2	9.6	11.6	12.4	12.0

Source: National Institute of Statistics, 2006; ^aCentral Directory of Statistics, 1969

Table 1.2 Urban and rural distribution of the population, 1992, 2002, 2004, 2006

	1992 (No. (%))	2002 (No. (%))	2004 (No. (%))	2006 (No. (%))
Total	22 810 035 (100.0)	21 698 181 (100.0)	21 673 328 (100.0)	21 584 365 (100.0)
Urban	12 391 819 (54.3)	11 436 736 (52.7)	11 895 598 (54.9)	11 913 938 (55.1)
Rural	10 418 216 (45.7)	10 261 445 (47.3)	9 777 730 (45.1)	9 670 427 (44.8)

Source: National Institute of Statistics, 2007

atheist or not having any religious belief at all. Although there is little population movement, since 1990 four types of migration flow can be identified in Romania: permanent, circulatory, educational or commercial border exchange. Of these, circulatory migration seems to have the largest share in terms of volume and consistency. The absolute number of Romanians working abroad as migrants doubled in 2002 compared with 2001 according to the National Trade Union (BNS). The Ministry of Labour, Social Solidarity and Family reported that in 2006 approximately 50 000 Romanians were working abroad as migrants mediated by the state agency (this agency is responsible for recruiting Romanians for work abroad while still retaining Romanian social insurance benefits). These official reports are published on a monthly basis on the Ministry's web site. Romanian men are more likely than women to migrate, mostly in search of labour opportunities, while their families stay behind, although often young couples migrate together. The preferred destinations for labour are Italy, Spain, Germany and France. Immigrants to Romania originate mainly from Turkey, countries in the Middle East and China.

1.2 Economic context

Romania is classified by the World Bank as a lower middle-income country with gross national income (GNI) per capita of US\$ 4850 in 2006, up from US\$ 2950 in 2004 (World Development Indicators, 2006). Since the revolution of 1989, Romania has gone through a period of rapid and major change in every sector, though the process of economic reform has been gradual rather than radical. Many major businesses such as those from industry (coal, mining, metallurgy, chemistry) and infrastructure (communications, energy, road construction) remained under state control. Privatization of these businesses started gradually in early 1990s but a scaling up of the process took place only during last decade. Romania experienced a fluctuating spurt of growth up to and including 1996. After the failed stabilization plan of 1997, Romania went through a second deep transitional recession.¹ A modest economic recovery was seen in 2000. The contributions to gross domestic product (GDP) in 2005 were services (47%), industry (24%), agriculture and forestry (8%) and construction (6%) (Table 1.3).

Table 1.3 Sources of gross domestic product, 1997–2005

Sources (%)	1997	1998	1999	2000	2001	2002	2003	2004	2005
Industry	30.9	27.8	27.1	27.6	25.8	28.1	27.3	27	24.07
Agriculture and forestry	18	14.5	13.4	11.4	13.4	11.4	11.7	13	8.46
Construction	5.2	5	4.9	4.8	5	5.8	6.0	6.1	6.34
Services	38.4	44.5	45.1	46.6	46.4	45.3	44.7	44.1	47.24

Source: National Institute for Statistics, 2006

With industrial output declining, services contracting and investment plummeting, unemployment has been rising. Since 1989, the working population and the number of wage earners fell significantly. The government mandated to reduce unemployment in 1997, and in 2000 economic recovery started: the unemployment rate fell from 8.9% in 1997 to 6.3% in 2004, but then rose to 7.2% in 2005 (Table 1.4). Unemployment is concentrated in urban areas: 8.9% (rural 4.3%). However, it is important to note that the measurement of employment may be inaccurate to some extent. For instance, persons recorded

1. Romania has experienced a boom and bust dynamic during the last decade. The first transformation recession (1990–1992) was followed by fluctuating and unsustainable growth during 1993–1996. The second transformation recession, which took place during 1997–1999, involved an exceptional balance of payments adjustment in 1999 (which allowed Romania to avoid external default). During this latter period, a substantial cleaning up of the banking sector was undertaken. Recovery started in 2000, when the GDP rose by 1.6%, and it speeded up in 2002 (GDP 4.8%). However, this acceleration of growth was accompanied by a substantial increase of arrears (to 40% of GDP), and by an explosion of imports (UNDP and Romanian Academic Society, 2001).

Table 1.4 Unemployment rate

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total (%)	6.6	8.9	10.4	11.8	10.5	8.8	8.4	7.4	6.3	7.2 ^a
Of which women (%)	7.5	9.3	10.4	11.6	10.1	8.4	7.8	6.8	5.6	6.4

Sources: National Institute for Statistics, 2006; International Labour Organization

officially as unemployed may in fact be working for companies that bypass employment regulations. The total working age population is estimated at 4.2 million (National Institute for Statistics, 2004).

Romania's inflation rate reached a peak of 154.8% in 1997 and decreased to 15.3% in 2003, 10% in 2004 and 7% in 2007 (Table 1.5). However, it remains higher than other transition countries of central and eastern Europe; Slovakia reported 8.6% in 2003, Hungary 4.7%, the Czech Republic 0.1% and Estonia 1.3% (Eurostat, 2008).

The privatization process and economic restructuring has also lagged behind that in other transition countries. In 1999, there was a payment crisis. Since 2000, new macroeconomic policies have been implemented that support economic

Table 1.5 Exchange, inflation and gross domestic product (GDP) growth rates 1991–2007

	US\$	Euro (ECU until December 1998)	Inflation rate (%)	GDP growth rate (%)
1991	76.47	87.81	n/a	n/a
1992	307.95	400.00	n/a	n/a
1993	760.01	884.6	n/a	n/a
1994	1655.09	1967.14	136.7	n/a
1995	2033.28	2629.51	32.3	n/a
1996	3082.6	3862.9	38.8	n/a
1997	7167.94	8090.92	154.8	-7
1998	8875.55	9989.25	59.1	-4.8
1999	15 332.93	16 295.57	45.8	-2.3
2000	21 692.74	19 955.75	45.7	1.6
2001	29 060.86	26 026.89	34.5	5.3
2002	33 055.46	31 255.25	22.5	4.3
2003	33 200.07	37 555.87	15.3	4.9
2004	32 636.57	40 532.11	11.9	8.3
2005	29 137	36234	9	4.1
2006	2.80	3.52	6.56	7.7
2007	2.43	3.33	6.9*	6.1*

Sources: National Institute of Statistics, 2005; National Bank of Romania; National Commission for Economic Forecasting

Note: *estimated

growth. A disciplined fiscal policy, complemented by a tight monetary policy and augmented by strong advances on structural reforms, has led to improved economic performance in the enterprise sector and has placed public finances and the financial system on much firmer footing. These changes resulted in robust GDP growth for four consecutive years (2001 to 2004), as seen in Table 1.5, a trend that continued over the next years. However, the value of the Romanian currency (leu; plural lei) against the US dollar and euro has worsened significantly since 1991 (Table 1.5).

Inflation and interest rates have declined steadily since 1997. The fiscal deficit has been brought under control and foreign exchange reserves have increased to historic highs; the external balance is comfortable (Table 1.6). Starting 1 July 2005, the domestic currency leu (ROL) was subject to redenomination and 10 000 old lei, in circulation at that date, were exchanged for 1 new leu (RON). Export growth has become vigorous, fuelled by private investment and the competitive depreciation in real terms of the currency against the euro. The competitiveness of the enterprise sector has been boosted by productivity gains. Romania is now a visible and attractive destination for international investors as a result of better ratings and improved access to international capital markets.

Table 1.6 Macroeconomic indicators, 1994–2005

	GDP per capita (ROL (US\$))*	Budget balance (% of GDP)	Gross international reserves (€ millions)	Foreign debt (€ millions)	Interest rates (interbank rates, deposit)
1994	2 189 700 (1323)	-4.2	2560.2	3806.2	n/a
1995	3 180 400 (1564.38)	-4.1	2051.4	4284	n/a
1996	4 817 800 (1563.1)	-4.9	2534.9	5811.8	n/a
1997	11 218 200 (1565.06)	-3.6	4226.3	7767.2	n/a
1998	16 611 200 (1871.5)	-2.8	3247	8054.3	n/a
1999	24 300 000 (1584.8)	-2.5	3638.3	8756.4	63.4
2000	35 826 400 (1651.5)	-3.6	5205.1	11 113.4	36
2001	52 109 400 (1793.1)	-3.1	7230.9	13 507.1	32.6
2002	69 402 700 (2099.5)	-3.1	8051.3	14 648.3	22.7
2003	86 996 300 (2620.3)	-1.5	8251.6	15 379	16.8
2004	11 372** (3488)	-1.49			
2005	13 320.8** (4577.5)	-0.78			

Source: National Bank of Romania, Ministry of Economy and Finance

Notes: n/a, not available; *GDP per capita in US\$ calculated based on the average annual exchange rate; **Value in RON (Romanian currency after denomination; 10 000 ROL = 1 RON)

Europe and the United States are the main investors in Romania. Their presence is largely concentrated in industry. The 60% concentration of foreign direct investment (FDI) in manufacturing is a reflection of Romania's comparative advantages. Foreign firms invest in capital-intensive steel and chemical industries as well as in the labour-intensive clothing and footwear trades. Several automotive and electrical machinery manufacturers have chosen to locate in Romania. They are concentrated geographically in the capital city. According to the National Trade Registry Office, by December 2003, 57% of FDI was directed to Bucharest, 17% to Transylvania and 16% to Muntenia, while other regions received below 5% of total inflows. As these firms sell over 50% of their production abroad, Romania has become a significant export platform. From 1990 to 2001, Romania received approximately US\$6.9 billion in FDI, including US\$2 billion from the privatization process.

Other countries in the region have attracted far more FDI than Romania during the same period. One reason for this difference was the slower evolution of the privatization process plus the relatively poor quality of information that was offered to the potential investors in Romania. Two additional reasons for caution among investors in Romania are the slow progress towards introducing and implementing the standards and institutions of western European countries and the range and magnitude of obstacles that investors face once they start doing business. It is widely recognized that administrative "harassment" related to tax obligations occurs and induces micro-corruption in Romania. Corruption on the whole, notably in the judicial area, is recognized as one of the most serious barriers to a good business environment in Romania. The government has proclaimed its determination to fight corruption, but the real test of implementation is still ahead.

Domestic policy has been underpinned by active international economic diplomacy. Romania is party to several bilateral, regional and international agreements that commit the economy to open trade in goods and services and open capital accounts. Adherence to these instruments serves to anchor domestic reforms in long-term, legally binding agreements and to integrate the country better into the global economy.

Economic efforts have recently centred around the process of accession to the European Union (EU), which occurred on 1 January 2007. The two EU Accession Progress Reports from 2006 recognized the Romanian economy as a functional market economy and praised the implemented monetary, fiscal and salary policies. The disinflation process continues and the salary increases have been supported by productivity increase (National Institute of Statistics, 2006). Nevertheless, despite valuable assets and strong growth potential, it should be noted that the Romanian economy has yet to catch up with the transition economies of central and eastern Europe.

Furthermore, following the dramatic collapse of the economy and slow recovery during the transition period, social disparities and wealth inequalities increased rapidly. This is reflected by the rise in the Gini index from 20 to 30 during the decade of transition, with a slight decline to 28.1 in 2003 (United Nations, 2003). In the 2004 Global Human Development Report (GHDR) of the United Nations Development Programme (UNDP), Romania was ranked 69 based on its human development index value of 0.786 (UNDP, 2005). By 2006, Romania was ranked 60 among 177 countries (United Nations, 2006).

1.3 Political context

According to the constitution approved by referendum in December 1991, Romania is a republic in which the rule of law prevails in a social and democratic state with separation of powers. The constitution also guarantees private property rights and a market economy. The head of state is the president, who is elected by a direct vote for a maximum of two five-year terms. The last presidential election took place in December 2004. The National Assembly consists of a Chamber of Deputies with 343 members and a Senate with 137 members. The members of both chambers elect their respective presidents. The president of the republic, after consultations with the two presidents of the parliament, designates the prime minister from the party that won the majority of seats in the parliament. The prime minister presents the cabinet to the parliament for approval.

Romania is divided into 41 districts (judet) and 2686 communes. The judet is the basic administrative unit of the country. Towns and communes are smaller administrative units.

Romania experienced significant political transformations after 1989, changing from the monopoly of a single party to a diversity of political parties, especially during the early 1990s. In the fifth free and democratic general election since 1989, which took place in December 2004, six parties were represented in parliament: the National Liberal Party, the Democratic Party (together forming the leading coalition), the Romanian Conservative Party, the Democratic Union of Hungarians (both support the coalition), the Social Democratic Party (opposition, but with the highest number of seats) and the Great Romania Party (nationalist party, also in opposition). In addition to these parties, the parliament dedicates some seats for the representatives of national minorities such as Roma, Ukrainians and Italians. The tied results in the most recent election provided for some difficulties in forming the new government because the elected president is from the previous opposition

while the parliament is dominated by the Social Democratic Party (PSD, the previous ruling party).

Romania is a member of the United Nations, the Council of Europe, the World Trade Organization, NATO and, since 1 January 2007, the EU.

The Government of Romania has ratified a range of international human rights treaties recognizing the right to health and other health-related rights, including the International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Covenant on Civil and Political Rights (ICCPR), the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), and the Convention on the Rights of the Child (CRC). It has also ratified regional human rights treaties including the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms and its Protocols, the European Convention for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment, the revised European Social Charter, and the European Framework Convention for the Protection of National Minorities.

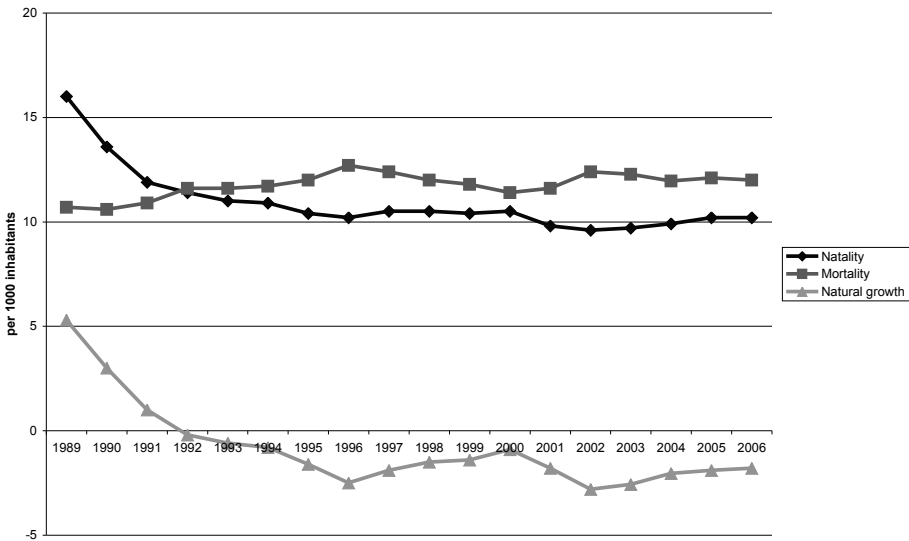
1.4 Health status

In the early 1960s, health status in Romania was comparable to that in western European countries. From the 1960s to the 1990s, the health of Romanians has increasingly lagged behind these countries. After 1990, a sharp increase in poverty and corresponding decrease in living standards had a deeply negative impact on the health of the Romanian population.

As discussed in Section 1.1, demographic changes in Romania have generally been characterized by negative natural growth. Natural growth began to decrease in 1989 (when population growth was estimated at 5.3 additional persons added to the population per 1000 inhabitants), with negative growth since 1992 reaching a low of $-2.8/1000$ inhabitants in 2002 (Fig. 1.2). The main causes for this negative trend were an increase in general mortality, a marked decrease in births, and emigration.

As seen in Fig. 1.2, the birth rate steadily declined from 16/1000 inhabitants in 1989 to 10.2/1000 inhabitants in 2006. The all-cause mortality rate showed a constant increase from 10.7/1000 inhabitants in 1989 to 12.0/1000 inhabitants in 2006 (a slight reduction from 12.4/1000 inhabitants in 2002). This trend can probably be explained by the decline in living conditions and decreasing efficiency of medical services. Mortality rates have always been higher for men than women, but the difference between the two indicators continuously

Fig 1.2 Evolution of birth rate, crude mortality and natural growth in Romania, 1989–2006



Source: Ministry of Public Health, 2006a

increased from 1970 to 2002 (Table 1.7). This widening of the gender gap in mortality can be attributed to the sharper increase in male mortality. However, in the following two consecutive years (2003, 2004), mortality rates showed small signs of improvement, decreasing for both sexes, the mortality gap also decreasing although a slightly greater improvement in male mortality than female. As the decrease in mortality rates is quite small and recent, it is difficult to identify the factors explaining this.

As evidenced in Table 1.7, the infant mortality rate declined from 49.43/1000 live births in 1970 to 16.8 in 2004 and 13.9 in 2006, but Romania still has the highest infant mortality rate among countries from the European Region. About half the infant deaths are related to perinatal conditions and malformations (57%), but a high proportion is from diseases of the respiratory system (37%). Mortality in those aged under 5 years has followed the infant mortality trend, decreasing from 58.53 in 1970 to 16.5 in 2006.

Life expectancy at birth for the general population has a slightly increasing trend in Romania, reaching 71.25 years in 2000 and 72.7 in 2006 (Table 1.7). However, life expectancy at birth in Romania is lower than in other countries of central and eastern Europe, and considerably lower than the EU average. As in other European countries, women in Romania live longer (76.23 years) than men (69.24 years).

Table 1.7 Mortality and health indicators, 1970, 1980, 1990, 2000, 2003, 2006

Indicator	1970	1980	1990	2000	2003	2006
Life expectancy at birth (years)	68.04	69.24	69.79	71.25	71.32	72.69
Male	65.71	66.61	66.62	67.81	67.71	69.24
Female	70.33	71.89	73.08	74.82	75.1	76.23
Mortality rate (per 1000 population)	9.54	10.44	10.65	11.4	12.27	10.26
Male	9.98	11.0	11.51	12.43	13.46	12.92
Female	9.12	9.91	9.8	10.42	11.13	8.08
Infant mortality rate per 1000 live births)	49.43	29.31	26.91	18.63	16.69	13.91
Mortality rate under 5 years (per 1000 live births)	58.53	35.68	34.31	22.2	19.59	16.48
Maternal mortality rate (per 100 000 live births)	116.38	132.11	83.56	32.83	30.59	15.49

Source: WHO Regional Office for Europe, 2007a

The main causes of death in 2006 in Romania were cardiovascular diseases (62.1%), followed by malignant tumours (17.6%), digestive diseases (5.5%), accidents, injuries and poisoning (4.9%) and respiratory diseases (4.9%). Deaths from external causes and from infectious and parasitic diseases are more common in Romania (4–5%) than in other EU Member States.

With investment in maternal health, perinatal mortality within the last two decades shows only a slowly decreasing trend (decreased from 15.06 deaths per 1000 births in 1980 to 10 deaths per 1000 births in 2006 (Table 1.8)), perhaps due to the poor provision of pre- and postnatal services, especially in rural areas. After an initial decrease from 37.03 deaths per 100 000 population in 1970 to 10.84 deaths per 100 000 population in 1980, mortality by infectious and parasitic diseases increased steadily to 14.55 deaths per 100 000 population in 2000 (and 15.25 in 2002), then decreased from 2003–2006. Mortality from tuberculosis more than doubled between 1980 and 2003, but also decreased from 2003 to 2006. A similar trend (steady increase with a recent slight decrease) is seen for mortality by digestive diseases and malignant neoplasm (Table 1.8).

Romania has one of the highest levels of cardiovascular diseases in the European Region (WHO Regional Office for Europe (2007a) *Health for All* database). Among cancer-related deaths, mortality from cervical cancer is twice as high in Romania than the EU average; however, mortality from trachea/bronchus/lung cancers and breast cancer is under the EU average.

The mortality rate for women is increasing, in particular deaths related to breast and cervical cancer. Between 1990 and 2000, breast cancer mortality increased by 7%. Moreover, Romania has the highest cervical cancer mortality

Table 1.8 Main causes of death 1970, 1980, 1990, 2000, 2003, 2006

Cause	Deaths (per 100 000 population)					
	1970	1980	1990	2000	2003	2006
Perinatal conditions (per 1000 births)	n/a	15.06	12.22	12.1	11.79	10
Infectious and parasitic diseases	37.03	10.84	12.52	14.55	14.13	11.25
Tuberculosis	n/a	4.13	7.41	9.56	10.05	7.5
Circulatory diseases	671.49	768.9	705.7	667.61	688.9	618.7
Malignant neoplasms	145.96	149.44	147.88	170.84	177.87	179.8
Trachea/bronchus/lung cancers	21.46	25.88	29.47	35.69	36.00	37.01
Mental and behavioural disorders	10.47	13.35	15.75	12.95	13.11	10.37
Respiratory diseases	201.35	165.94	105.86	67.25	62.91	52.98
Digestive diseases	42.4	50.88	53.07	61.44	65.75	58.02

Source: WHO Regional Office for Europe, 2007a

Note: n/a, not available

rate in the region. The *Reproductive Health Survey* (UNDP, 1993) showed that an average of 69% of Romanian women aged 15–44 had never been tested for cervical cancer. High cancer rates among Romanian women are mainly a result of lack of information on the need for testing or reluctance to be tested. Other studies, like the National Oncology Surgical Society Survey, cited by the United Nations System in Romania (2003) *Common Country Assessment Report* from 2003 indicated that the real figure may be closer to 90%, particularly among women of low socioeconomic status and in rural areas where women are much less likely to be tested.

The *World health report 2003* estimated that the health-adjusted life expectancy at birth was 63.1 years in Romania, placing it 65th in descending order among the 192 member states (WHO, 2003). Using slightly different methodology, a study conducted by the Institute of Public Health Bucharest found the health-adjusted life expectancy to be 64.9 years (Csiki et al., 2002). The same study found that it was higher in women than in men for the whole Romanian population and for each district. In addition, rates of avoidable deaths in Romania were highest among the 20 European countries included in a recent study (Newey et al., 2003; see Chapter 8).

In Romania, the patterns of morbidity and mortality have changed in the last decades. The prevalence of chronic disease has increased, a trend which is associated with the synergic action of biological, environmental and lifestyle determinants together with the influence of socioeconomic and health care conditions.

A study carried out by the Institute of Public Health Bucharest in 1999 calculated the disability adjusted life years for 1998 in order to reveal the ranking for the burden of disease in Romania (Table 1.9). The main causes of disease burden for Romania in 1998 were identified as cardiovascular diseases, malignant neoplasm and mental disorders (Marcu et al., 2000).

Table 1.9 Structure of disability impact by causes in Romania, 1998

	DALY (per 1000 inhabitants)	Percentage of total DALY
Cardiovascular disease	60.00	31.88
Malignant neoplasm	18.97	10.10
Mental/behavioural disorder	18.79	9.98
Accidents, injuries, poisoning	16.73	8.89
Central nervous system disease	13.67	7.26
Digestive disease	11.89	6.32
Respiratory disease	10.77	5.72
Infectious diseases	3.67	1.95
Other	33.61	17.86
Total	188.10	100

Source: Marcus et al., 2000

Note: DALY, disability adjusted life years

Routine data related to the morbidity of noncommunicable diseases and their determinant factors underestimate the real amplitude of the phenomenon. Data of good quality are available only from the *Health status surveys* performed by the Computing Centre of Health Statistics and Medical Documentation of the Ministry of Public Health.² The last survey was carried out in 1997 (Ministry of Public Health and Family, 1997). Evidence suggests the lifestyle factors with the greatest impact on health status are, as in other countries, smoking, alcohol consumption, illicit drug consumption, an unbalanced diet and low physical activity.

Taking these in turn, smoking rates have increased in Romania since 1990 among both women and men, but especially among young people. The *Health status survey* carried out in 1997 showed that 46% of men and 13% of women over 18 years of age are regular smokers (Ministry of Public Health and Family, 1997), which is higher than the EU average but comparable with the countries of central and eastern Europe. According to WHO *Health for All* data for 2003, 21% of the Romanian population over 15 smoked daily. Romania participated in

2. The Ministry of Public Health was called Ministry of Public Health and Family between 2001 and 2004. The Health Reform Law 95/2006 renamed it Ministry of Public Health. For the sake of consistency, it is hereafter referred to by its current title: Ministry of Public Health.

the international negotiations regarding the Framework Convention on Tobacco Control. The Minister of Public Health also signed the Warsaw Declaration in support of the Framework Convention. Since 2002, smoking in public institutions is regulated by law.

Regarding alcohol consumption, the national health survey carried out in 1997 revealed that 56.2% of persons over 15 years of age consumed alcohol, of which 3.7% reported dependency (Ministry of Public Health and Family, 1997). That same year, alcohol consumption was most prevalent in those aged 25–44 years (66.3% of this age group consumed alcohol).

Illicit drug consumption emerged as a problem in Romania after 1990. Surveys of intravenous drug use produce widely differing prevalence estimates. The Institute of Health Services Management estimated 1000 intravenous drug users in Romania in 1998, whereas a preliminary study by UNICEF estimated approximately 30 000 intravenous drug users in 2002 in Bucharest alone (Galan et al., 2003). More work in this area is needed to reach firm conclusions.

The average diet is relatively unhealthy, characterized by high consumption of animal fats (there was a slight improvement between 1996 and 2001, which was followed by a more recent resurgence) (Table 1.10). In addition, Romanians tend to eat high-caloric food with a high sugar and salt content. It is likely that diet in large part explains the high rates of cardiovascular diseases.

Table 1.10 Food intake 1990, 1995, 2000, 2003, 2006

Intake (daily average/inhabitant)	1990	1995	2000	2003	2006
Energy (kcal)	3038	2933	3020	3233	3455
Energy from animal origins (kcal)	711	717	691	818	925
Proteins (g)	96.7	95.9	94.7	106.8	114.3
Animal	42.8	43.2	42.0	51.7	58.6
Lipids (g)	93.4	79.3	85.1	94.7	107.5
Animal	49.8	47.0	44.4	51.9	59.1
Carbohydrates (g)	433.3	441.4	449.7	467.7	485.4

Source: National Institute for Statistics, 1995, 2007

Socioeconomic factors also have a marked impact on the health status of the Romanian population, in particular the high levels of poverty, unemployment, social exclusion and the structure of household expenses. Poverty was estimated at 27% in 2002, and extreme poverty at 11%, according to the World Bank Report from September 2003 (World Bank, 2003). The most affected area is the north-east region of Romania, where the poverty rate is estimated to be higher than 40%. In addition the unemployment rate in Romania was 7% in December 2003; however, this estimate only included the officially registered unemployed (Section 1.2 has more details on the economic situation and unemployment in Romania).

The environment also has a major influence on health status. According to data reported by the Ministry of Environment and Waters Management (2002), Romania has experienced a slight improvement in air quality. This improvement can be attributed to some extent to the reduction in industrial activities coupled with re-engineering programmes, in addition to increased activity of the Environmental Protection Inspectorates.

The most important environment problems in terms of surface waters are organic nutrients (nitrogen and phosphates), flow modification of transport conditions of sediments, contamination with dangerous and oxygen-consuming substances, and lack of water-purifying units. Inappropriate safety measures for storing and disposal of solid and dangerous waste and the management of industrial wastewater may also contribute to the degradation of subterraneous waters.

Overall housing conditions seemed to show a slight improvement between 1992 and 2002, at least regarding access to water and the sewage system (Table 1.11). The decrease in heating facilities could be related to the significant price increase of fuel and also to poverty.

Table 1.11 Access to water and sewage system

Region	1992 (% dwellings provided with)					2002 (% dwellings provided with)				
	Water supply	Sewerage system	Electric plant	Heating	Kitchen	Water supply	Sewerage system	Electric plant	Heating	Kitchen
Romania	51.6	50.7	96.7	39.1	89.5	53.2	51.1	96.3	36.4	88.2
North-east	39.1	38.6	94.4	34.1	84.2	38.8	37.7	94.2	30.6	82.9
South-east	51	50.5	96.9	39.4	89.7	50.3	48.4	96.4	36.5	89.1
South	36.3	35.7	97.1	26.8	90.3	39	37.5	96.2	23.8	89.7
West	62.3	60.8	98.5	42.7	94.4	66.7	62.6	98.2	38.1	92.3
Centre	62.3	61	97	38.1	91.8	65.5	62.2	96.7	38.3	90
Bucharest	86	85.2	99.6	75.9	97.2	86.9	86.1	98.7	77.3	96.2
Urban	86.9	86.4	99.5	71.9	96.2	87.6	85.6	98.6	67.6	94.7
Rural	11.4	10	93.6	1.7	81.8	15.1	12.9	93.7	2	81.1

Source: National Institute for Statistics, 2002.

Notes: heating refers to thermal heating/central heating

Routine morbidity data related to communicable diseases are of much better quality than those for noncommunicable diseases. The functional surveillance system is presently undergoing restructuring, funded by the European Commission.

Out of all communicable diseases, public health priorities in Romania are tuberculosis and sexually transmitted diseases. The incidence of tuberculosis in Romania is the highest in the European region, with 135.6 new cases per 100 000 population in 2003. The incidence of syphilis increased threefold between 1989 and 2003, rising from 19.8 new cases per 100 000 population to

58.3. In 2005, 490 new cases of HIV infection were detected, out of which 25 were in children. According to the official data, in December 2006 there were 16 877 registered HIV/AIDS cumulative cases. Of these, 12 089 were alive, with 5293 suffering from full-blown AIDS (3526 children) and 6613 pre-AIDS (4488 in children). In 1989, Romania experienced a unique major nosocomial HIV epidemic in which more than 10 000 institutionalized children contracted HIV through blood transfusions and infected needles. Many of the new cases of HIV/AIDS infections continue to arise from patients born between 1987 and 1989 who were infected through unscreened blood and blood products and the repeated use of contaminated needles (UNAIDS, 2007). The character of the HIV epidemic has modified from that in 1990 in that there is an increase in the number of cases in adults, the main transmission being heterosexual (57%) (Ministry of Public Health, National Commission for HIV/AIDS, 2005).

Despite consistently high rates of vaccination in the past several decades in Romania, there were major measles outbreaks in 1993 and 1997. A total of 28 321 cases were reported in 1993 and 23 579 cases in 1997. Vaccination rates since 2000 have been high (Table 1.12) and in 2003 only 9 measles cases were reported. Polio was officially eliminated in 2000. Compared with other countries in the European Region, Romania has a high rate of measles vaccination (Fig. 1.3).

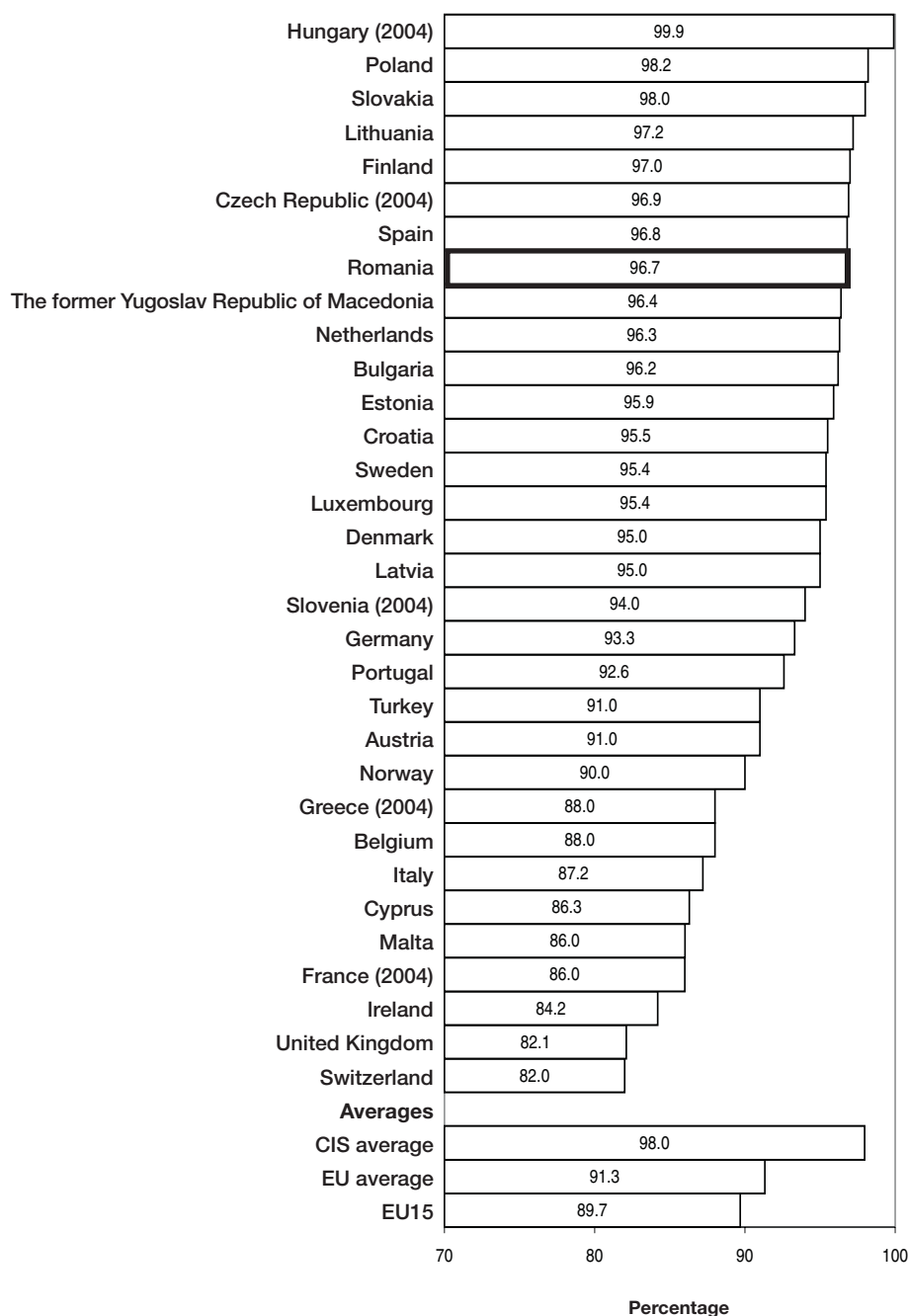
Table 1.12 Immunization levels 1990, 2000, 2003, 2004, 2006

	1990	2000	2003	2004*	2006 ^a
Measles (% of children under 12 months/3 years)	92	98	97.2	97.1	96.7
DTP (% of children 12 months)	96	99	97	97	98.2
Poliomyelitis (% of children under 12 months)	92	99	97.2	97.2	96.9
Tuberculosis (% of new live borns)	90	99.7	99.6	98.8	99.2
Hepatitis B (% of children 6 months)	–	98	98.5	98.8	98.5

Sources: WHO Regional Office for Europe, 2004; ^aNational Centre of Communicable Diseases Prevention and Control, 2006

Notes: DTP, diphtheria, tetanus and pertussis vaccine

Health problems among the Roma population are complex and can be attributed to cultural (lifestyle) and socioeconomic (low living standards) factors. The Roma population, one of several minority ethnic groups in Romania, is estimated to number between 1.8 and 2.5 million. Life expectancy and infant mortality rates are ten years shorter and 40% higher, respectively, amongst Roma than the general population. In 2002, the Roma population was almost five times more exposed to severe poverty (Zamfir and Preda, 2002).

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

Source: WHO Regional Office for Europe, 2007a

Notes: CIS: Commonwealth of Independent States; EU: European Union; EU15: EU Member States before May 2004

Homelessness and vulnerability to forced evictions, overcrowded living conditions and limited access to safe water and adequate sanitation are problems that disproportionately affect Roma people, rendering them vulnerable to communicable diseases, including hepatitis A and tuberculosis. Other factors contributing to the poor health status of the Roma population include low levels of education, poor nutrition, poor communication between health professionals and Roma health system users, lack of access to information on health issues and a lack of identity cards and documentation that enable access to health insurance. This may explain why only 34% of Roma in 2002 were covered by the health insurance fund, compared with the national average of 75% (Ministry of Public Health, 2004a). As well as giving rise to poverty and social exclusion, stigma and discrimination inhibit access to health care. For example, some doctors reportedly refuse to treat Roma, while stigmatizing attitudes within health services may deter Roma from seeking treatment in the first place (UNDP, 2004).

Maternal and child health

Maternal mortality was very high in the 1970s and 1980s (Table 1.7), reaching the highest rate in 1982 (174.81 maternal deaths per 100 000 live births). This trend was largely a consequence of the demographic policy of the communist regime, which prohibited abortions. After the decree banning abortions was abrogated, maternal mortality decreased dramatically from 169.4 maternal deaths per 100 000 live births in 1989 to 83.56 in 1990. Since then, the maternal mortality rate has continuously decreased, reaching 22.32 in 2002. Despite this favourable trend, Romania still has one of the highest maternal mortality rates in Europe, owing largely to abortions outside of medical facilities and to obstetrical causes.

In terms of infant mortality and child health, Romania shows some mixed results (Table 1.7); while mortality has decreased significantly since the mid 1980s, it remains at levels that far exceed those found in other EU Member States and central and eastern Europe.

The most frequent causes of death for the age group 0–1 are prenatal causes (37.8%), respiratory diseases (27.5%) and congenital malformations (22%) (National Institute for Statistics, 2006). In 2000, nearly one-third of deaths occurred in medical institutions, another one-third in maternity hospitals and one-fifth at home. In 2006, less than one-third died in medical institution but 43.7% of deaths occurred in maternity hospitals while infant deaths at home remained the same as in 2000. The underlying cause is inadequate access to health care and primary health care services (United Nations System in Romania, 2003; Ministry of Public Health, 2007a).

The mortality rate for children under 5 years of age was 16.48/1000 live births in 2006, a decrease from the rate of 34.31 registered in 1990 (Table 1.7). The most frequent causes of death for the under 5 age group in 2002 were accidents (35%), which remained at the same level in 2006, and respiratory diseases (26.6%), where a decrease was recorded in 2006 (United Nations System in Romania, 2003; Ministry of Public Health, 2007a). In 2004, the prevalence of low height for age appeared to be improved (5.5%) compared with previous years and this can be linked with the slight improvement of the socioeconomic conditions and life standards (UNICEF, 2005).

The incidence of low birth weight (less than 2500 g at birth) was below 8% in 1991. After an increase to 8.4% in children born in 1993, the rate constantly decreased down to 6.6% in 1999. The incidence of low height for age remains very high. In children aged 2–5 years, the incidence has increased from 9% 1991 to as much as 20% in 2000, but with a decreasing trend through the following years (5.5% in 2004 (UNICEF, 2005)). Problems of low height for age are more severe in the lower income strata of the population (United Nations System in Romania, 2003).

Anaemia, malnutrition and poverty also increase mortality rates. Anaemia has been found in as many as half of the children who have been tested. Severe anaemia has been detected in approximately 1% and mild anaemia in up to 11% of the children who have been tested. Studies also show that, on average, anaemia is more widespread in rural areas, where the rate is 54%, and is significantly more frequent in children born to mothers with less than four years of schooling; it also is linked to premature birth and a birth weight less than 2500 g. In addition, a study in 2003 showed that the overall median urinary iodine excretion was 64 mg/l, which is below the internationally accepted minimum figure of 100 mg/l for adequate iodine nutrition in school children, thus indicating continued iodine deficiency. No significant improvement was revealed during latest survey in 2004 (UNICEF, 2005).

Congenital syphilis has had a constant increasing trend since 1989, from 0.095/100 000 up to 1.94/100 000 in 2002. It is believed that a decreasing trend starting in 2003 (0.92) may reflect the strengthening of case definition. However, this is difficult to evaluate, partly because syphilis incidence per 100 000 population does mirror the congenital syphilis data, increasing from 19.8 in 1989 to 58.4 in 2002 and decreasing to 44.6 in 2003 and 40.78 in 2004 (Ministry of Public Health 2003). Gonorrhoea maintains a decreasing trend: the recorded incidences being 11.62% in 2003 and 10% in 2004. However it is widely recognized by all health professionals that gonorrhoea is underreported.³

3. The data for 2004 have been supplied through unpublished reports of the Romanian Centre for Disease Control.

2 Organizational structure

2.1 Overview of the health system

The government represents the highest authority within the Romanian health system, performing its stewardship role through the Ministry of Public Health. The National Health Insurance Fund (NHIF) represents the main financial source as the third party payer of the system and receives the funds collected by the agencies of the Ministry of Finance. Through the Yearly Framework Contract, agreed by the NHIF with the Ministry of Public Health and the CoPh, the health care services to be contracted by the District Health Insurance Funds (DHIFs) from both public and private health care providers (hospitals, ambulatory care, primary care and so on) are established.

At the national level, cross-sector approaches in health policy are ensured through collaboration between the Ministry of Public Health, the Ministry of Labour, Social Solidarity and Family, the Ministry of Interior and Administrative Reform, the Ministry of Education and Research, Ministry of Finance, the CoPh, the College of Pharmacists and the NHIF. At district level, cross-sector interventions are ensured through the district public health authorities (DPHAs), DHIFs, district councils, district public finance departments and district departments of the Ministry of Labour, Social Solidarity and Family, district school inspectorates, and district local government prefects.

2.2 Historical background

Romania has had a long tradition of organized health care. Between the First and the Second World Wars, there was a social insurance system based on the

Bismarckian sick-fund model. Workers from industrial enterprises, merchants, employers and their families, and the self-employed were insured; an income-related premium was paid in equal proportions by employers and employees. However, at the time, the insured represented only 5% of the population.

In 1949, the law on health organization of the state was passed and there was a gradual transition to a Semashko health system. This system was based on the principles of universal coverage and services free at the point of delivery. The main features of the Romanian health care system during the four decades following were government financing, central planning, rigid management and a state monopoly over health services. There was an absence of a private sector (the private system was abolished) and all professionals in the health system were salaried civil servants.

There have been many changes since 1949. In 1978, a new health law was developed. In 1983, out-of-pocket payments for some ambulatory services were introduced, but all services continued to be provided in state-owned facilities. The absence of competition, poor quality of health services, underfunding, inefficiency, inflexibility and inadequate health care equipment and facilities led to increasing pressure for change.

The Semashko health care system in pre-1989 Romania was typical of central and eastern European countries. Central to this system was the state provision of services to all citizens, leaving little or no choice to the user but seeking to achieve a high level of equity. A highly regulated, standardized and centralized system was operated through the Ministry of Public Health. The legacy of Semashko system has been reflected in the problems faced by the health system after 1990:

- relatively small proportion of GDP dedicated to health care;
- centralized and inequitable allocation of resources (with “under the table payments” and privileges to political leaders);
- lack of responsiveness to local needs;
- poor-quality primary care services, inadequate referral and overemphasis on hospital-based curative services with lack of good equipment and drugs;
- supply of beds and personnel not matched by the provision of equipment and drugs;
- growing inequity in health care provision between regions and between different social groups;
- poor managerial capacity within the health care system and lack of a health care workforce with competencies and capacities in policy development and management.

Between 1990 and 1995, the government and the Ministry of Public Health issued a series of decrees and orders, which over time have led to many changes. None of these changes questioned the right to health care, which is enshrined in Article 33 of the Romanian Constitution. These regulations covered many areas, such as reorganization and financing of health services, training, ways of payment for health care professionals and management of major health problems (tuberculosis, AIDS). Of special interest was the introduction of a new system for paying primary health care providers in eight pilot districts (Government Decision no. 370/1994), which prepared the implementation of subsequent reforms (Chapter 7).

Since 1995, some important laws concerning the structure and organization of the Romanian health care system have been passed. Of these, the most significant were Law 74/1995, concerning the organization of the CoPh; Law 145/1997, on social health insurance; Law 100/1997, on public health; Law 146/1999, on hospital organization; and Law 336/2002, regarding pharmaceuticals. The new regulations changed the entire structure of the health care system and established the legal framework for the shift from an integrated, centralized, state-owned and state-controlled tax-based system to a more decentralized and pluralistic social health insurance system, with contractual relationships between health insurance funds as purchasers and health care providers. In December 2001, the Law on Social Work was issued, which restructured the legal framework for social care. The qualification of social workers and their profession was introduced only at the end of the 1990s and the establishment of clear relations between the health care system and social care system is ongoing.

Since 2000, the basic laws regulating the health system have been modified and adjusted several times. These changes reflected the political approach of the ruling parties to financing issues. The Liberals and Christian Democrats dominated the period 1997–2000 and implemented the shift to a social health insurance system in 1998. From 2001 to 2004, the Social Democrats were in power and made changes intended to strengthen or regain state control over resources. Regardless of the political approach of the parties, the high turnover of ministers and the lack of strategies with clearly defined objectives contributed to slow or delayed reforms in the health sector. Furthermore, the abilities, skills and competencies of those involved with implementing reforms have not been adapted in line with the changes made to the system.

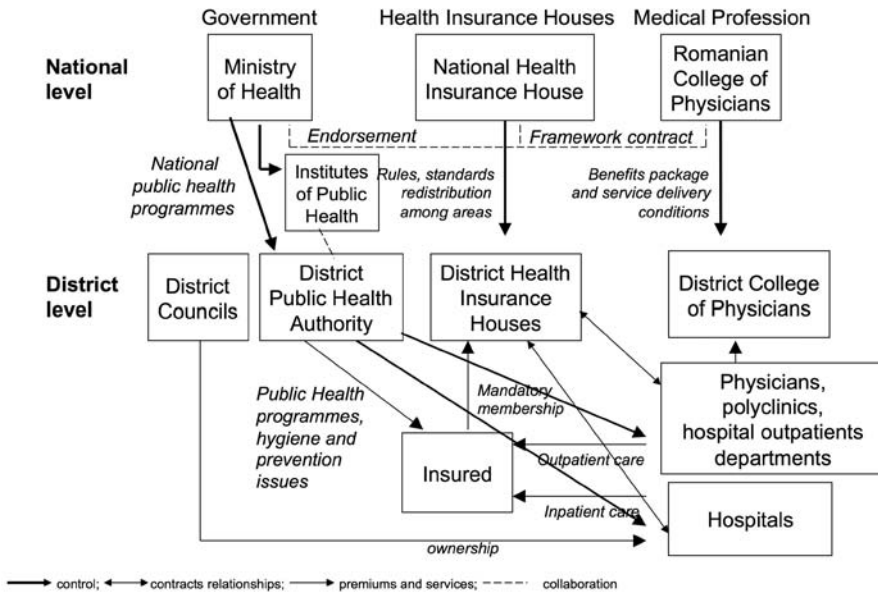
The new government elected at the end of 2004 (Section 1.3) engaged in a new health care reform defined by a comprehensive Health Reform Law, which came into force in May 2006. The new Law, with 17 components (most notably pertaining to social health insurance, private health insurance, hospitals, community care, primary health care, pharmaceuticals, emergency services, public health, national and European health card, national health programmes,

professional liability, establishment of a national school of public health and management), includes the majority of measures that should be taken in order to increase health system performance and to achieve the Government health policy objectives.

2.3 Organizational overview

Since Romania adopted a mandatory social health insurance system in 1998, the roles of the main participants in the health system have changed, the relationships between different organizations have become more complex and the number of participants involved has increased. The system is organized at two main levels: national/central and district (judet). The national level is responsible for attaining general objectives and ensuring the fundamental principles of the government health policy. The district level is responsible for ensuring service provision according to the rules set by the central units (Fig. 2.1).

Fig. 2.1 Organizational chart of the statutory health system



The central level

The main central institutions are the Ministry of Public Health (formerly named the Ministry of Public Health and Family) and the NHIF.

Ministry of Public Health

The Ministry of Public Health is the state's institution responsible for ensuring the health of the nation. It does so through the definition of policies and strategies, and planning, coordinating and evaluating outcomes. Since 1 January 1999, the Ministry of Public Health ceased to have direct control over the financing of a large part of its network of service providers. Responsibilities consist of:

- Stewardship role in engaging main stakeholders in different types and different stages of health policies and strategies formulation, implementation and evaluation;
- Defining and improving the legal environment in the context of wide public circulation that includes views of stakeholders and of patients;
- Ensuring increased transparency in managing the state's budgetary allocation for health. The Ministry of Public Health retains responsibility for financing and managing the national public health programmes, selected specialty services and investments in buildings and high-technology medical equipment.
- Regulating both the public and the private health sectors, and their interface.
- Ensuring leadership in conducting research and developing policy and planning in relation to developing reform policies and monitoring their impact; monitoring the impact of financing reforms; monitoring the need to upgrade buildings, major repairs and high-technology medical equipment; and monitoring the emergence of the private health sector;
- Defining and improving the legal and regulatory framework for the health care system. This includes regulation of the pharmaceutical sector as well as public health policies and services, the sanitary inspection and the framework contract.
- Developing a coherent human resources policy and for building capacity for policy analysis and management of the health care system.

National Health Insurance Fund

The NHIF is an autonomous public institution that administrates and regulates the social health insurance system. Between 2002 and 2005, the NHIF was under the coordination of the Ministry of Public Health. In 2005, the NHIF regained its independent status and is currently mainly responsible for:

- developing the strategy of the social health insurance system;
- coordinating and supervising the activity of the DHIFs;
- elaborating the framework contract, which together with the accompanying norms sets up the benefit package to which the insured are entitled, and the provider payment mechanisms (see Section 3.2);
- deciding on the resource allocation to the DHIFs (see Section 3.4);
- deciding on the resources allotted between types of care (see Section 3.4).

The NHIF has the authority to issue implementing regulations mandatory to all DHIFs in order to insure coherence of the health insurance system. According to the initial Health Insurance Law, the leadership of the NHIF was meant to be established through national election. However, a 2002 government ordinance decided that the Council of Administration of the NHIF should be appointed differently. At present, according to the Health Reform Law (95/2006), the Council of Administration consists of 17 members with the following composition:

- five representatives of the government: one each appointed by the Minister of Public Health, the Minister of Labour, Social Solidarity and Family, the Minister of Public Finances, the Minister of Justice and the Romanian President;
- five representatives of trade unions;
- five representatives of employers' associations;
- two members appointed by the prime minister upon consultation with the National Council of the Elderly.

The president of the NHIF is appointed by the prime minister. The Council of Administration has two vice-presidents, elected by Council members.

Other central level institutions

Parliament. In a formal constitutional sense, the parliament has a key position in the policy process. In reality, however, the predominance of the majority party coalition in power has meant that any autonomous role of parliament is lessened (see Section 7.3).

Presidency. The president is the most important figure in the current political scene; an expression of presidential interest is the quickest route to placing health sector reform on the political agenda. However, health sector reform was not held as a political priority by the presidents following 1989 even though they had as advisers key figures from the Romanian medical field. The overall process of transition and the pressing economic demands have tended to relegate health sector reform to a secondary but not insignificant level.

The Ministry of Public Finances. This ministry plays a key role in decisions involving health sector reform measures. Since reform tends to involve changes in public finances, Finance Ministry approval is required. Therefore, reforms need the signature of the Minister of Finance (together with the Minister of Public Health and the Minister of Labour and Social Protection). Any policy document that involves the expenditure of public money requires the technical approval of the Minister of Finance; therefore, this minister has an important role in shaping health policy reform.

Other ministries. Others with competence in health matters include the Ministry of Labour and Social Solidarity and Family, which provides funds for health insurance contributions for people on unemployment or social benefit; the Ministry of Transport; the Ministry of Defence; the Ministry of Interior and Administrative Reform; the Ministry of Justice; and the Romanian Intelligence Agency, which all own and operate their own parallel health systems consisting of separate health care facilities (hospitals, polyclinics, dispensaries). Section 3.2 has a more detailed discussion about these parallel health insurance funds.

Professional associations and trade unions

The College of Physicians. The CoPh is responsible for regulating the medical profession. It has a national structure – the Romanian College of Physicians – and local, independent organizations at district level. Membership is mandatory for all Romanian physicians. The boards, both at national and district level, are elected every four years. The CoPh has important and extended responsibilities in all areas of concern for physicians, including training and accreditation. In order to have the right to practise, all physicians should be registered with the district CoPh and pay a membership fee. Newly established medical practices should also be approved at the district level of the CoPh, in accordance with a set of criteria issued by the national level of CoPh. Legislation was passed in 1995 to establish the CoPh. Elections were held for this body but were confirmed by the government only after the 1996 election. The CoPh started to function in 1997. The CoPh is the organization where doctors must compulsorily register,

as provided by the 1995 law. The CoPh originally had important and extended responsibilities in all areas of concern for physicians. This involved most fields of the health care sector, including the health insurance system, where the CoPh was involved in negotiating the framework contract that forms the basis for all individual contracts between DHIFs and providers. By virtue of this, the CoPh had an influence on the contents of the benefits package for the insured population, the type of reimbursement mechanisms in place for health service providers, and what drugs are compensated and in what proportion. After the change of government following the 2000 elections, new legislation initiated by the Ministry of Public Health considerably reduced the powers of the CoPh in areas related to health policy; consequently, the CoPh currently has only a consultative role in the majority of the health policy decisions in which it was previously involved. (Section 7.3 has more information on the role of the CoPh in recent reforms.)

Federative Chamber of Physicians. The trade union of doctors is the Federative Chamber of Physicians. It is struggling to keep its traditional trade union role in face of the trade union role assumed by the CoPh.

The Romanian Medical Association and the Society of General Practitioners. The Romanian Medical Association is the successor of the single professional association that existed before 1989 during the communist regime. Today, the association has limited its activities to scientific concerns, professional issues being dealt by the CoPh. The Society of General Practitioners (GPs) was established initially as a purely scientific society. However, gradually it has started to be involved also in matters of the profession, since GPs felt that the CoPh does not deal properly enough with their profession, the management being dominated by specialist physicians coming mainly from hospitals.

The College of Pharmacists. This is the national association with which all pharmacists should register as provided by specific legislation; its influence has decreased in the last two years as the government enacted legislation that diminished its powers. However, they remain in a strong position in influencing the number of pharmacies as they issue the legal agreement for each new pharmacy. As with the CoPh, the organizational settings apply to the profession at national as well as district levels.

The Order of Nurses and Midwives. This is the most recent established professional association based on Law 307/2004 and is the professional organization where nurses and midwives have to register prior to getting permission to practise their profession. Like the other professional associations, it is organized at district and national level. Its main role is to control and monitor the way in which nursing and midwifery is practised in Romania and to influence and contribute to the policies regarding these two professions. To

date, its influence has been limited to the harmonization with EU requirements of professional training in both professions.

Association of Nurses. There is also an Association of Nurses, a professional association that is promoting a change of culture in the profession, developing training programmes and projects for change, but this organization has little influence on the broader decision-making process.

Sanitas. The trade union for nurses is Sanitas. It plays the traditional role of a trade union and is more influential in promoting nurses' interests as part of a strong national trade union, whose leader is currently a former Romanian President.

The district (judet) level

The representatives of the main central authorities at district level are the DPHAs (representing the Ministry of Public Health) and the DHIFs (representing the NHIF). This is also the case for the professional associations: District College of Physicians, District College of Pharmacists and District Order of Nurses and Midwives.

In theory, local government and district councils also play an important role in the health system. The district councils are the elected bodies of the local government system. They provide the framework required for services of public interest at county level, including health care, and they decide on the budget and local taxes of the county administration. According to the new legislation (Emergency Ordinance 70/2002) starting from 2002, district councils are the owners of (almost) all public health care facilities and, in principle, could have an important influence on the shape of health services in Romania; in practice, owing to the lack of both financial and human resources, district councils are playing only a minor role in health policy development at present.

District public health authorities

Until the introduction of the social health insurance system, the basic administrative unit of health services organization at district (judet) level was the District Public Health Directorate. Since 1999, this structure has been transformed into a system of DPHAs and DHIFs. There are 42 DPHAs operating as decentralized units of the Ministry of Public Health (one for each of the 41 districts plus one for Bucharest). The DPHAs are responsible for:

- developing, implementing and evaluating public health programmes;
- monitoring the health status of the population in relation to the main environmental risk factors;

- controlling and evaluating health care provision and the functioning and organization of health care providers;
- organizing health promotion and health prevention activities;
- communicating to the public and to local authorities on environmental health matters and involving the community in the decision-making process at the local level;
- collaborating with other participants involved in health and health-related fields at the district level.

Each DPHA is led by the administrative board. The director is usually a physician and is appointed by the Minister of Public Health with the prefect's agreement. The director holds executive power and is assisted by three deputy directors (two physicians and an accountant) and by one state sanitary inspector. One deputy director is in charge of the monitoring of health status and of public health programmes and the other is in charge of coordination and management of health services at the district level. In terms of financial resources, DPHAs control less than a third of the available public funds; the rest are under the management of the DHIFs.

District health insurance funds

Since 1999, the DHIFs have been the main third party payers in Romania. Health service providers are no longer state employed; they are paid on a contractual basis by the DHIFs, which have been also entitled to make contracts with private providers. Between 1999 and 2002, the DHIFs were in charge of raising social health insurance contributions locally from employers and employees working in that district and retained and used 75% of collected funds, (25% being sent to the NHIF for redistribution). Since 2002, the contributions have been collected at the national level by a special body under the Ministry of Finance authority (Fiscal Administration National Agency), and DHIFs have raised contributions only from insured persons directly paying the whole contribution (such as the self-employed) (see Sections 3.3 and 4.1).

Each DHIF is led by a Council of Administration made up of 11 members. According to the existing rules, besides the DHIF President, the other Council of Administration members are three representatives of trade unions, three representatives of employers' associations, one member nominated by the respective district council (a body that is elected at the district level every four years) one member appointed by the prefect at the DPHA's proposal, and two representatives of the District Council of the Elderly. Two vice-presidents are elected from the board members.

In addition to the 42 DHIFs (including the Bucharest Health Insurance Fund), two countrywide health insurance funds were established in 2002, one related to the Ministry of Transportation for transport workers (CAST) and one related to employees of the Ministries of Defence, Justice and Interior and the agencies related to national security (CASAOPSNAJ). These two social health insurance funds have to follow the same rules and regulations as the DHIFs, but they have different target population as payers, and all of them are coordinated by the NHIF.

Health care providers

The majority of health care providers are no longer public servants and state employed; rather they are paid through different contractual arrangements by the DHIFs. Primary care physicians are known as “family doctors”, having been assigned the new role of private practitioner (Section 6.3). They are paid by a mix of capitation and fee for service. For specialist care from ambulatory facilities, the former polyclinics have been turned into independent medical facilities. Specialists working in ambulatory care are paid by fee for service (Section 3.6). Hospitals receive prospective payments consisting of a mix of payment methods. Payment for medical personnel working in hospitals is still based on salary, but the hospital boards can fix salaries according to individual competency and workload (within some limits set by financial regulation). Most hospitals are (still) under public ownership, with very few initiatives of private practice.

The Romanian Hospital Association is the association of hospital managers. It has grown in the last few years, mainly owing to the financial pressures on hospitals and the consequent need of managers to interact, but it has little influence in the decision-making process. However, hospital directors as individuals have played an important role in influencing the health policy process, managing to preserve the hospital system almost unchanged since 1989.

For information on other important participants in the process of health care reform, see Section 7.3.

2.4 Decentralization and centralization

The Law of Local Public Administration, passed in 1992, set out the structure of decentralized public administration in the country. This has defined the

organizational context in which the public sector health services operate and focuses on four forms of decentralization.¹

The first relates to functional “deconcentration” within the Ministry of Public Health. There are 42 DPHAs under the Ministry of Public Health and these are meant to apply guiding principles of health policy at the district level. Each DPHA is led by a director, who is always a medical doctor appointed by the Ministry of Public Health with the agreement of the prefect (see below).

The second is prefectural deconcentration, which refers to the central appointment of a prefect in each district. Prefects are representatives of the central government in their district. They ensure the legality of all decisions made by the local authorities and coordinate the activities of the functionally deconcentrated state services. The prefect also heads an administration board, which includes the president of the district council, the mayor of the principal urban centre in the district, and the directors of the deconcentrated central government bodies (including the director of the DPHA). The prefect must approve appointments made by the Ministry of Public Health to the Administration Council of the DPHA. The prefect can also issue instructions on technical aspects of health services, although these directions must be agreed by the director of the DPHA.

The third aspect of decentralization is devolution, which operates through a system of local government in the form of locally elected councils. These have a number of responsibilities with implications for the health sector. These include:

1. *Deconcentration* stands for a partial transfer of the central administrative authority to a local office of a ministry (in the Romanian case the Ministry of Public Health). In deconcentration, there can be a partial delegation of power, while the real responsibility continues to rest with the person or institution invested by law with the prerogatives in question (i.e. the Ministry of Public Health); the institution in question can at any time resume the prerogatives it had delegated to the local authority. In *functional deconcentration*, each civil servant is accountable to the ministry of origin. In this arrangement, field staff of central ministries and administrative staff of local jurisdiction operate independently of each other. Both sets of officials are responsible to central authorities but they have no formal power over each other and coordination takes place informally. The second form of decentralization is *prefectural deconcentration*, where a local representative of the central administration (for instance a prefect or a governor) is in charge of all administrative functions within a certain territory, while being accountable, in turn, to a central body (the Ministry of the Interior and Local Administration in Romania). Although the local personnel may be hired, paid, trained, promoted and transferred by central ministry, local officers act as a technical staff to the prefect (governor) and are accountable to the prefect for the way they run local affairs. The ministries exert a technical supervision and local personnel receive simply instructions pertaining to technical matters and to general policy issues from the ministries within the authority of which they fall. The third form of decentralization is *devolution*, which implies transferring authority to a lower political level and the creation (or strengthening) of an autonomous subnational administrative level (i.e. local administration) that should benefit from greater independence from the national echelon. Such administrations are allowed to have their own budgets, within which they can move funds from one headline to another in accordance with local health needs. The final form of decentralization is *delegation*. This implies the transfer of managerial responsibilities for a number of well-defined positions to certain organizations that are outside the central administrative structure and subject only to an indirect control by the central structure. Although authority to manage specific functions is usually transferred by delegation, the central government maintain ultimate responsibility for those functions.

- approving the organization and activities of the local civil servants, including their appointment
- ensuring the proper functioning of local services
- monitoring hygiene in public places and of food products
- preventing and limiting outbreaks of infectious disease
- authorizing the opening and closing of local health facilities.

This structure of public sector operation has nevertheless maintained a relatively centralized character through the lines of central–periphery authority, financial control and central administrative regulation. The provisions on the expenditures at national level are established yearly by the state budget law. The institutions at central level (Ministry of Public Health, NHIF) further allocate the budget at district level on the basis of proposals made by the districts (DPHAs, DHIFs). The level of actual expenditures should be as close as possible to the expenditures provisioned in the budget. The provisions on expenditures are considered the maximum of expenditures accepted. The institutions can spend less than the provisions but this is not in their interest as it might have a negative impact on the next year budgetary provisions.

The fourth aspect of decentralization is delegation, which has operated since the introduction of the health insurance system. Initially, the health insurance funds collected compulsory, income-based health premiums, outside the state budget, throughout 41 DHIFs. These insurance funds are autonomous bodies that were entitled to retain and use 75% of the collected funds at the local level. This changed in 2002, since which time all funds are collected at the central level on behalf of the NHIF, which allocates them to the districts based on its own formula (Section 3.4). There are further plans for decentralization (www.ms.ro) by reorganizing some of the central institutions and their branches, mainly those responsible for public health services delivery.

2.5 Patient empowerment

Information for patients

Within a 2002 project financed by PHARE,² the NHIF together with the Ministry of Public Health, the national CoPh and the Centre for Health Policies and Services (Centrul pentru Politici si Servicii de Sanatate) issued *The insured chart* (Centre for Health Policies and Services, 2002). This contains basic information

2. PHARE is a pre-accession instrument financed by the EU to assist countries to prepare to join the EU.

about social health insurance system organization and functioning, health service providers, the terms under which the insured can benefit from health services, a list of services that are not covered by social health insurance and contact details of each DHIF where patients can address further questions and complaints. The Law on Health Reform issued in 2006 introduced a contractual relationship between the insured and the health insurance fund, outlining the rights and obligations of both parts.

Patient rights

The principles laid out in the Declaration of Patients' Rights in Europe launched by WHO are found in the Romanian Law 46/2003 on the Rights of the Patient.

- Patients have the right to be informed of the available health services, the health care providers' qualifications and the regulations regarding the functioning of the medical units; patients should be also informed of their health status in a polite, non-technical manner.
- Patients have the right to provide informed consent on the medical services they receive; the consequences of treatment denial should be explained to the patient. Consent should also be obtained from the patient if he or she is involved in medical teaching or medical research; if the patient does not have the capacity to be involved in the decision-making process, consent should be obtained from his or her legal representative.
- Patients have the right to the protection of confidentiality of information regarding his or her health status, the treatment received and personal information. Patients also have the right to privacy concerning family or personal life, unless this interferes with treatment or the patient puts his or her life or the lives of others in danger.
- Patients have the right to health care, including palliative care; the services should be provided by accredited personnel or medical units, as close as possible to the patient's environment. Rationing of scarce resources should be done on medical criteria. When pregnancy puts the woman's life in danger, the woman's right to life prevails.

Law 46/2003 has provisions regarding the obligation of providers to display patients' rights in the medical units and states the obligation of health authorities to issue annual reports on compliance to patients' rights. Nonetheless, a recent survey revealed that many patients are still unaware of their rights (Centre for Health Policies and Services, 2005).

The rights of patients with mental health problems are stated by the Law on Mental Health Promotion and Protection of Persons with Psychiatric Disorders

adopted in 2002 (Section 6.10). This law adopts the principles of the 1991 *United Nations General Assembly Resolution 46/119 on the protection of persons with mental illness and the improvement of mental health care*, including provisions for the use of the least-restrictive treatment option, confidentiality and informed consent. The law has a special section on the rights of persons with mental disabilities, recognizing not only their health and health care rights but also all civil, political, economic, social and cultural rights as mentioned in the *Universal Declaration of Human Rights*, as well as in other international conventions and treaties in this field.

Patient choice

According to the health insurance legislation, patients have free choice of both health care providers and (until 2002) DHIF. If a person chooses a provider located in another locality, the travel costs should be covered by the insured. Patients have the right to change their family doctor after being registered for a period of six months if not content with the services received. The free choice of the health insurance fund has had no effect since 2002, when funds ceased to be collected locally and a single national fund (NHIF) was created. Free choice of provider is practised where the density of providers allows it and it is more common in cities. A survey on the opinion of patients with regard to health reform has revealed an increase in the quality of primary care services as a consequence of introducing free choice of primary care physician, which occurred as early as 1994 when free choice was introduced together with changing the payment method of the GP from salary to a mix of per capita and fee for service in an eight- pilot district experiment (Institute of Hygiene, Public health, Health Services and Management, 1995).

Patients cannot easily exercise the right to choose between family doctors in the countryside or hospitals in small cities, as in these situations there is usually a single provider. The choice is limited by the fact that if patients want to go to a provider from another locality they are required to pay for the travel costs.

Complaint procedures (mediation, claims)

Departments of public relations dealing with patients' rights and access to entitlements do exist in most public institutions. Within the structure of the health insurance funds there is a department of public relations that ensures public access to information and deals with the complaints of the insured. The claims are presented to specific departments depending on the nature of the problem raised. The public relation department has the task of following the process and communicating the decision to the patient. Public relations

departments issue monthly reports on both the information requests and the complaints.

Patients can also address complaints to the Professional Jurisdiction Department of the District College of Physicians. The complaints are analysed in accordance with the Deontology Code and handled to the Professional Discipline Commission, which decides upon the sanctions. If the decision is contested or the doctor involved is a member of the District College of Physicians managerial team, the complaint is sent to the Superior Professional Discipline Commission of the national CoPh. Complaints addressed to the legal system are analysed in accordance with the Civil Code. The legal verdict prevails over the CoPh's decision.

Citizens can also complain directly to the Ministry of Public Health or to its DPHAs, where special departments do analyse the claimed issues. Usually those analyses investigate if rules and procedures were kept, and solutions have an almost exclusive administrative character. This kind of investigation does not interfere with the professional inquiry carried out by the professional associations.

The above complaint processes are in place, although there is no available evidence on utilization or evaluation of the effectiveness of these schemes.

Patient safety and compensation

Professional liability for health services providers is regulated by the Health Reform Law (95/2006). The law statutes compulsory insurance for professional liability for all health services providers in both the public and private systems. The insurance companies provide compensation for damages done to patients by health care providers. In the case of a patient's death, the compensation is provided to the patient's successors. Compensation includes the expenditure generated by a legal trial, which should be supported by both the damaged patient and the insured provider. The upper limits for compensation are established by the NHIF by consultation with the representatives of the insurers' professional associations and health providers' professional associations. The provider's culpability is established by a commission for malpractice monitoring constituted by the representatives of the DPHAs, DHIFs, district branches of health providers' professional associations and a legal medical expert. However, the *post factum* provision of the compensation as well as the cumbersome process may prevent patients from exercising their rights.

Patient participation/involvement

Important progress with patient participation in the health-policy decision-making process has been achieved during the last two years through the formalization of communication and cooperation with patients' associations in Romania. One step forward was Ministerial Order No. 466 of 2006, with subsequent modifications, that introduced the right of patient organizations to attend meetings of the special consultative committees of the Ministry of Public Health. At the same time, extensive consultations have taken place with the major umbrella patient associations: the Federation of Cancer Associations, the Federation of Diabetes Associations, the National Alliance of Associations for Rare Diseases, etc. Partnership agreements have been signed between the Ministry of Public Health and some of these umbrella associations with a view to working together for the development of the strategies (partnership with cancer associations to develop the National Cancer Plan, for example).

Patients are involved in the decision-making process by having representatives in the Administrative Councils of the NHIF and DHIFs. There is no election mechanism for the patients. In fact they are represented through the trade unions. The NHIF Administrative Council has five representatives from trade unions, five representatives from employers' associations and two representatives from the National Council of the Elderly (out of 17 members) (Section 2.3). The DHIF has three representatives from trade unions, three representatives from employers' associations and two representatives from the District Council of the Elderly (out of 11 members).

Starting in 1999, the Centre for Health Policies and Services has conducted periodic surveys on population opinion on the health sector. The survey conducted in January 2005 (Centre for Health Policies and Services, 2006) showed that the population was still not properly informed on their rights or other legislative provisions. Only 10% of the interviewed persons knew the size of the health insurance premium as a percentage of their income and 79% did not know about the content of the basic benefits package.

In regards to satisfaction with health services, the 2005 survey showed that, in comparison to the previous years, the population perception on health services had worsened: 31% (versus 23% in 2003) considered the health system to be unsatisfactory and in need of major reforms (Table 2.1). The population was unsatisfied mainly with hospital services (37%), but to some extent also with family doctor services (19%), ambulatory services (9%) and emergency services (7%).

Table 2.1 Citizen satisfaction with health care

Question	Answer (%)				
	Very unsatisfied	Not satisfied	Satisfied	Very satisfied	No reply
How satisfied are you with services provided by your family doctor?	4	11	49	25	11
How satisfied are you with services provides by the hospital?	5	19	52	23	2

Source: Centre for Health Policies and Services, 2005

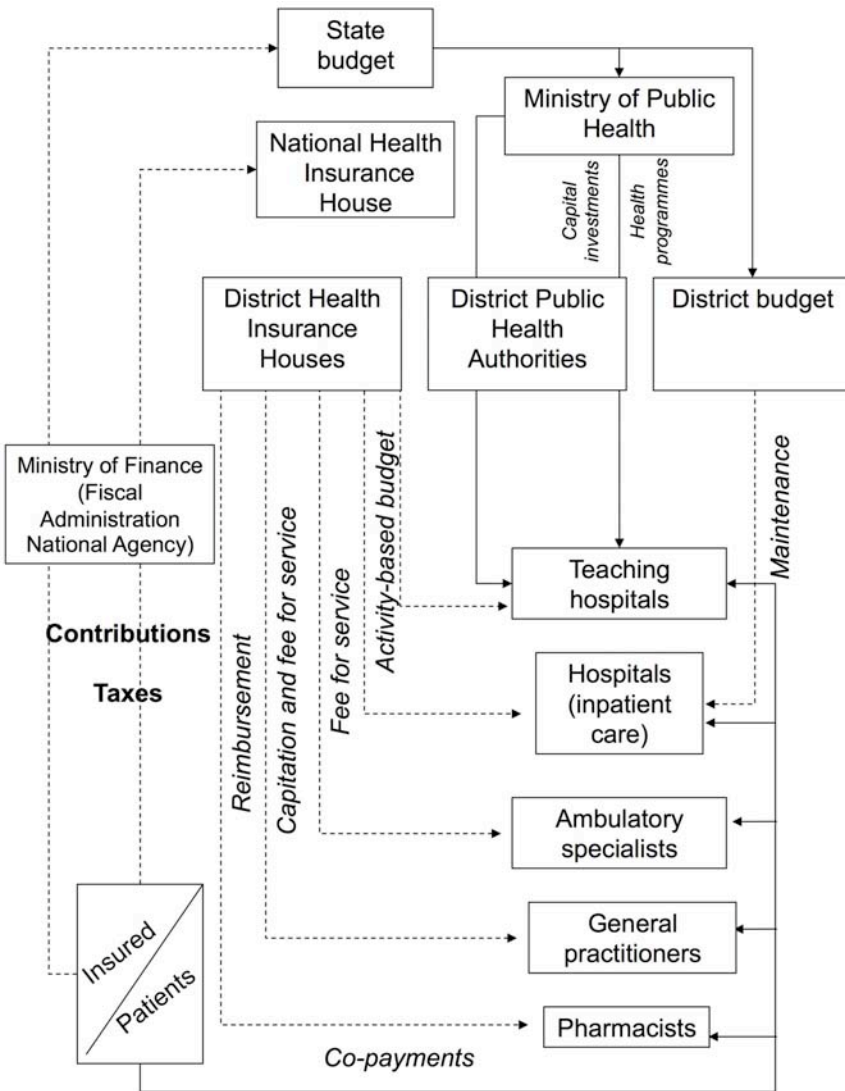
3 Financing

As in most countries, Romania has a mix of compulsory and voluntary elements of finance but the dominant contribution mechanism since 1998 has been social insurance. Health funds derive primarily from the population (Fig. 3.1), the most part through third party payment mechanisms (social health insurance contributions and taxation) but also by out-of-pocket payments (co-payments and direct payments). Social insurance contributions are collected by the Fiscal Administration National Agency of the Ministry of Finance (or in the case of the self-employed by the DHIFs). Taxes are also collected by the Ministry of Finance and then allocated to Ministry of Public Health, which then funds the DPHAs for public health programmes. Tax funding is also allocated to the NHIF (then to the DHIFs) to cover the social insurance contributions of the non-employed and exempt population groups. The Fiscal Administration National Agency allocates the social insurance revenue to the NHIF, which then distributes to the DHIFs based on a formula of risk-adjusted capitation.

Social health insurance expenditure has constantly increased from 64.6% in 1998 to 82.7% of total expenditure on health in 2004. From 2007, due to the allocation of taxes on alcohol and tobacco to health funding, the health insurance contribution fell to an estimated 75% of total expenditure. Health insurance covers preventive health care services; ambulatory health care; hospital care; dentistry services; medical emergency services; complementary medical rehabilitation services; pre-, intra- and post-birth medical assistance; home care nursing; drugs; health care materials; and orthopaedic devices. DHIFs can negotiate contracts with both private and public providers.

Taxes continue to be an important contribution mechanism for health care as the state budget retains responsibility for funding public health services and capital investments, as well as preventive activities included in high-priority national health programmes. The level of funding through taxes has been

Fig. 3.1 Financial flow chart of the current Romanian health system



boosted by the recent decision by the Ministry of Public Health and Parliament to dedicate funds collected through alcohol and tobacco taxation to programmes for prevention and emergency care.

Minimal expenditures on maintenance, repairs and nonmedical materials are supported by local budgets. Private providers have no access to these funds.

Out-of-pocket payments take the form of co-payments for goods and services covered by the insurance scheme or direct payment to private or public providers for services outside of the yearly framework contract. Informal payments are also common, mostly in hospitals.

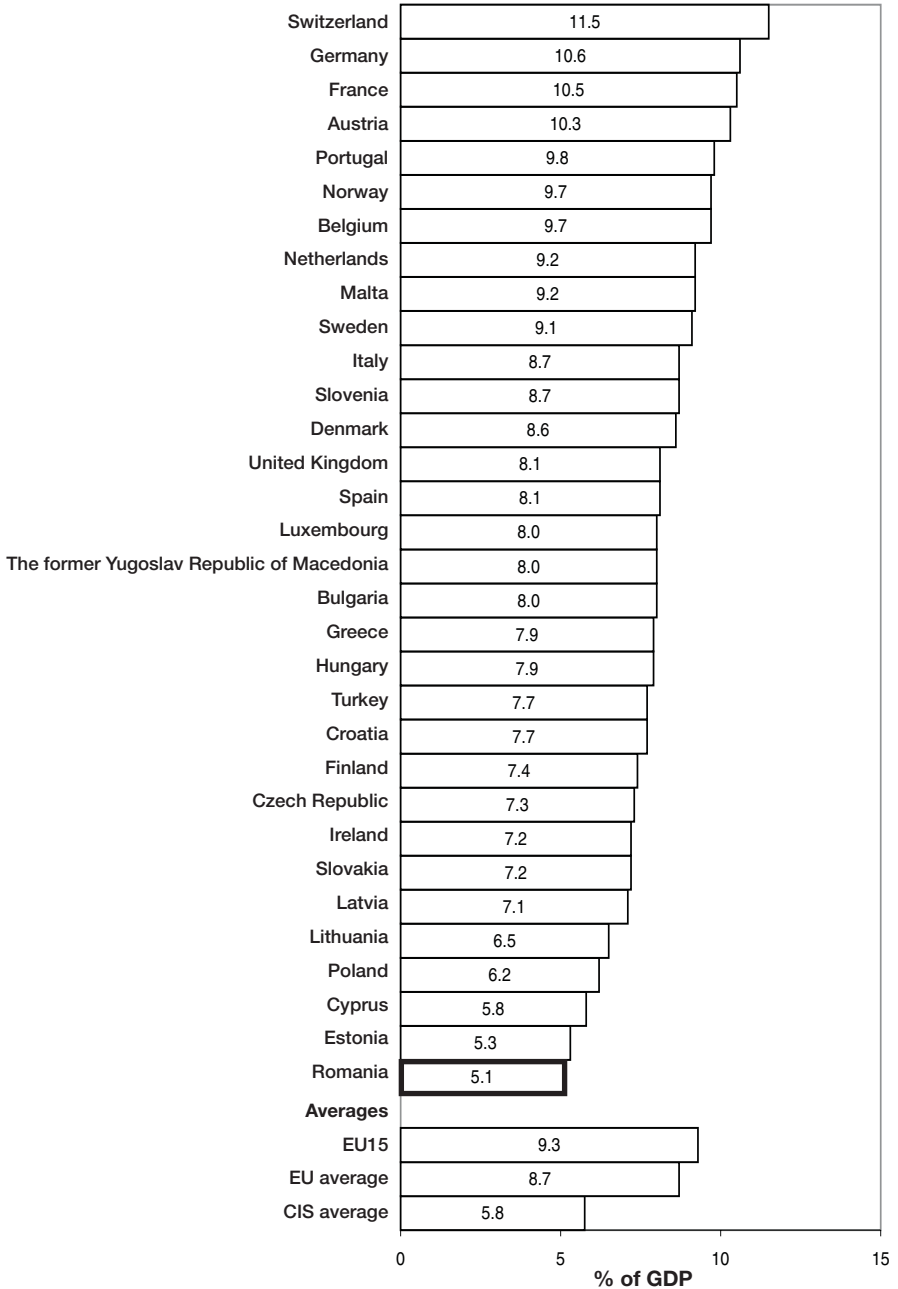
3.1 Health care expenditure

The implementation of the health insurance scheme in 1999 increased public expenditure to 3.4% of GDP (in 1999) compared with 2.8% in 1998. Compared with other European countries, Romania still has the lowest percentage of GDP spent on health (Fig. 3.2). There were no further dramatic increases in the following years, but the general trend of health expenditure in Romania as share of GDP is increasing (Fig. 3.3). The level of health care expenditure per capita is also much lower compared with countries from western Europe, and with many countries from central and south-eastern Europe (Fig. 3.4). The international comparability of the Romanian data is limited, however, as it does not include private expenditure, which is not regularly collected or calculated (Section 3.3). Therefore, it is unclear what has happened in terms of private expenditure growth. Though the level of private spending is underestimated, it appears health expenditure from public sources as a proportion of total spending is relatively low (Fig. 3.5). Expenditures include mainly those of the NHIF and Ministry of Public Health for medicines, health services, preventive services, medical equipment and capital investments.

Total health spending increased significantly between 2001 and 2007 (Table 3.1), a trend that continued in the following years. Increases in expenditure were mostly driven by hospitals and pharmaceuticals, as shown in Figs. 3.6 and 3.7. The very high level of expenditures for both hospital services and pharmaceuticals in 2005 included the payment of debts from previous years. The increase of hospital expenditure has been in part a result of the un-restructured and poorly managed hospital sector (Section 6.4) but also results from important public capital investments in high-technology equipment, which has accounts for over US\$1 billion in the last six years (Vladescu, 2005).

The increased spending on pharmaceuticals was caused by the lack of adequate regulatory mechanisms, despite the frequent changes of legislation (Section 6.6). Only in late 2005 were some regulations introduced designed to contain costs, such as the replacement of prescription in commercial denominations with prescription in international non-proprietary names (INN); limiting over-the-counter drugs that can be prescribed and reimbursed by the social health insurance system; the introduction of reference pricing

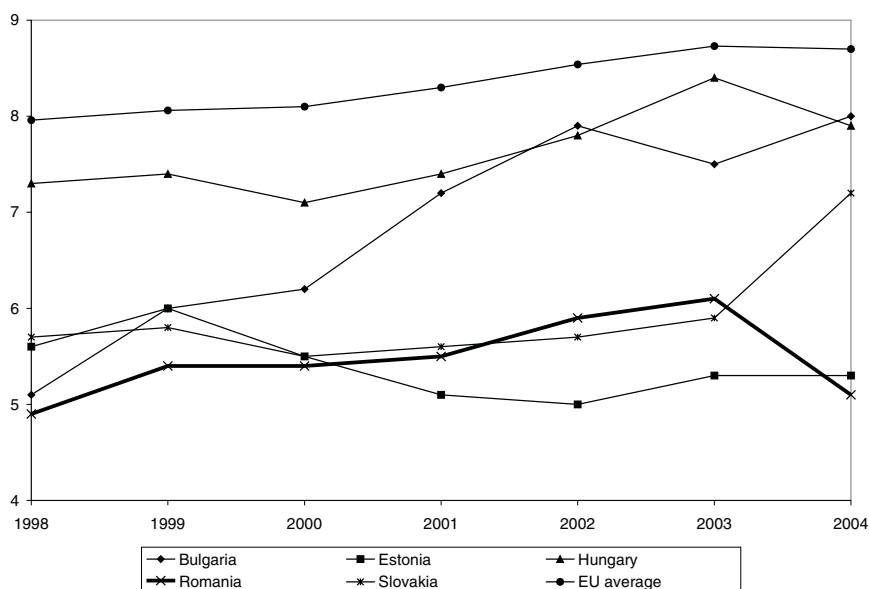
Fig. 3.2 Health care expenditure as a share of gross domestic product (GDP) in the WHO European Region, 2005



Source: WHO Regional Office for Europe, 2007a

Notes: CIS: Commonwealth of Independent States; EU: European Union; EU15: EU Member States before May 2004

Fig. 3.3 Trends in health care expenditure as a share of gross domestic product (GDP) in Romania and selected other countries, 1990–2005

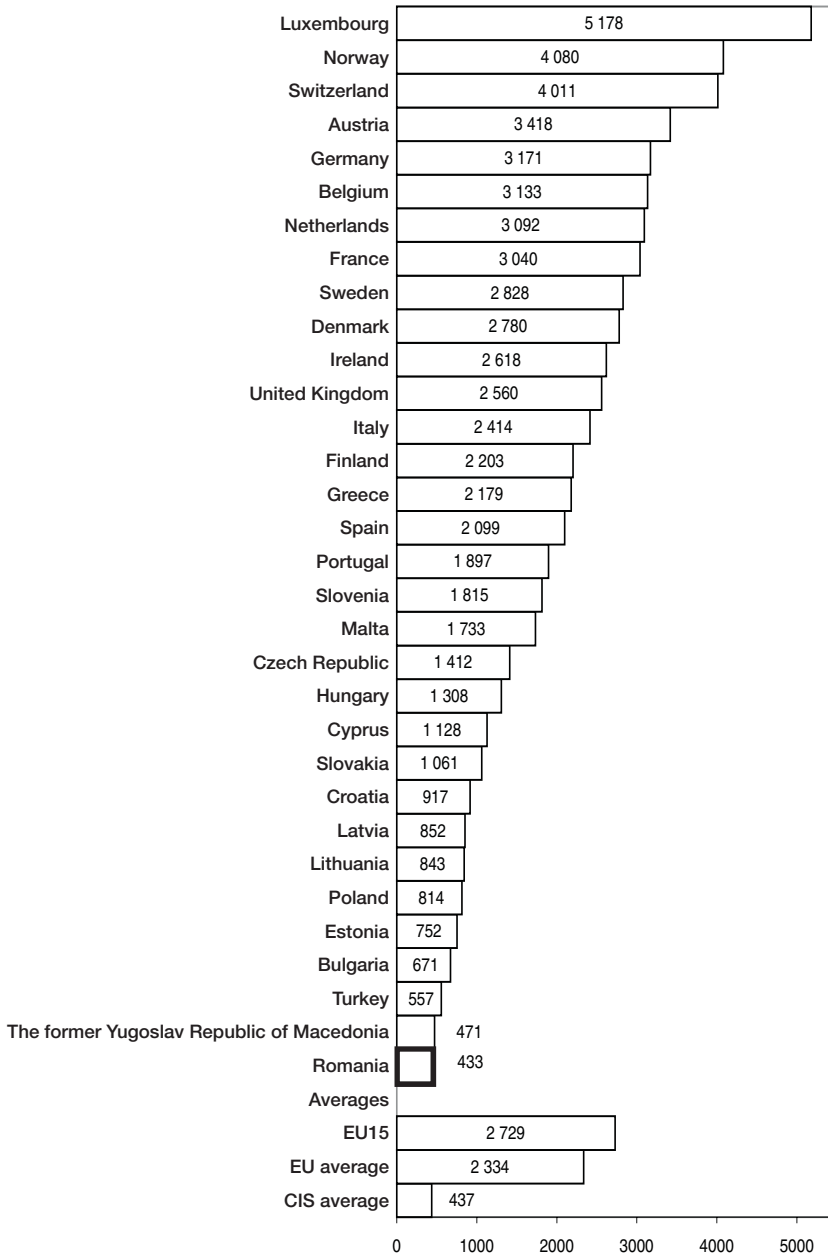


Source: WHO Regional Office for Europe, 2007a

for reimbursement; reinforcement of existing regulation of contracts between the health insurance funds and pharmacies; and penalties for health service providers that prescribe drugs over the amount stated in the contract signed with funds (Vladescu, 2005).

The important increase in pharmaceutical expenditures from 2004 to 2005 could have two main causes. First, a new parliament was elected in 2005, and a new government was appointed. They made some legislative changes that led to a budget increase for the NHIF, as well as the possibility for NHIF to spend all the collected funds. Previously, some of the collected funds were used by the government for other purposes. The second cause was the election year 2004, when the government decreased significantly the co-payments of drugs within the reimbursement scheme and increased the number of the 100% reimbursed medicines. This resulted in accumulation of debts at the level of the NHIF (debts that were paid in 2005).

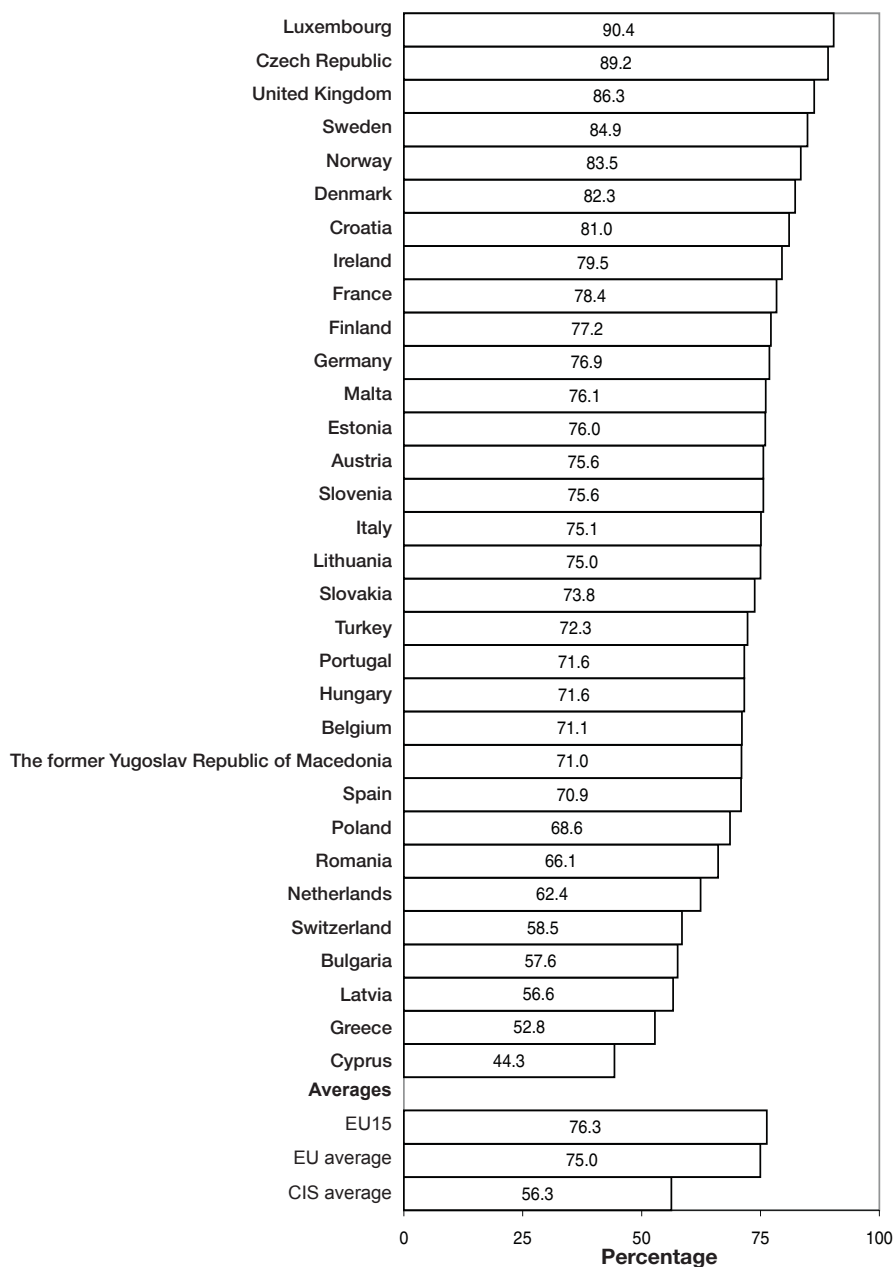
Fig. 3.4 Health care expenditure per capita in the WHO European Region, 2005



Source: WHO Regional Office for Europe, 2007a

Notes: CIS, Commonwealth of Independent States; EU, European Union; EU15, EU Member States before May 2004; PPP, purchasing power parity

Fig. 3.5 Health expenditure from public sources as a percentage of total health expenditure in the European Union and selected countries, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2007a

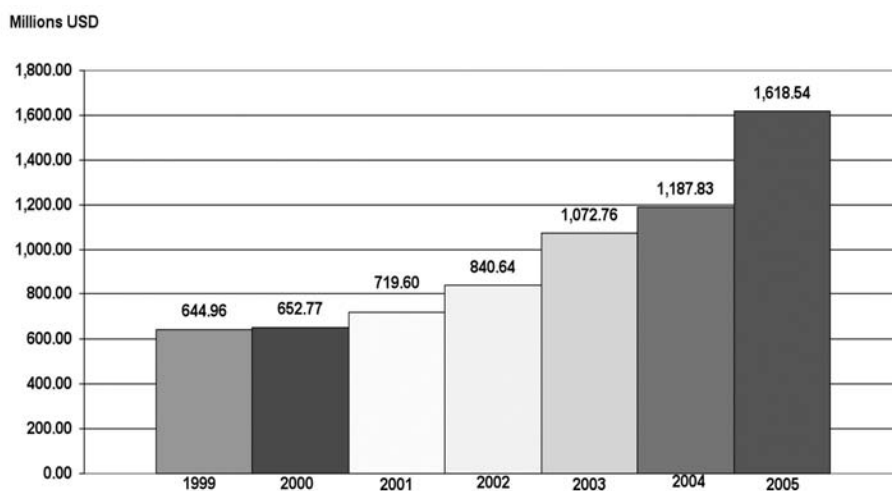
Notes: CIS: Commonwealth of Independent States; EU: European Union; EU15: EU Member States before May 2004

Table 3.1 Evolution of total public health expenditure and National Health Insurance Fund expenditure, 2001–2004, 2006–2007

Year	Total public health expenditure (millions)			NHIF expenditure (millions)		
	ROL	US\$	€	ROL	US\$	€
2001	46 382.6	1596	1782	37 423.1	1.287	1437
2002	60 692.1	1836	1941	48 349.4	1.462	1546
2003	76 977.9	2318	2049	62 282.5	1.875	1658
2004	84 807.6	2598	2092	69 629.1	2.133	1717
2006	10 550.589*	3702	2997	9010.65*	3 161	2560
2007	1 5680.167*	6453	4709	11 812.12*	4861	3547

Source: Ministry of Public Health, 2004a; Ministry of Economy and Finance, 2007

Note: NHIF, National Health Insurance Fund; *since July 2005, national currency redenominated (10 000 ROL = 1 RON)

Fig. 3.6 Spending on hospital health services 1999–2005

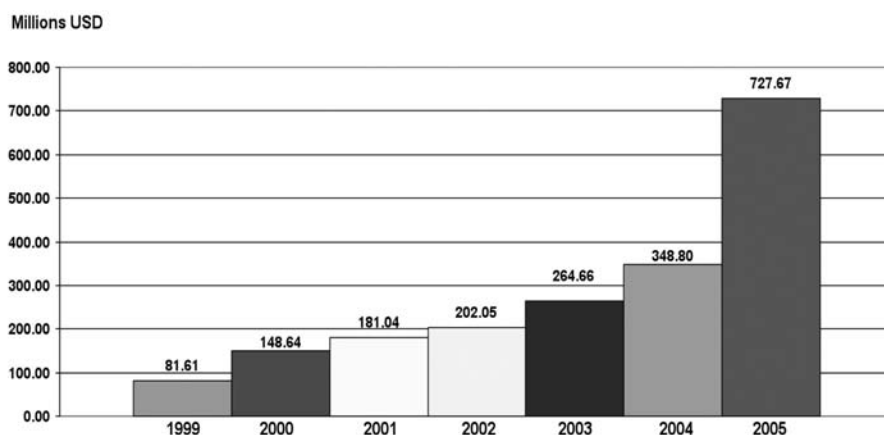
Source: National Health Insurance Fund, cited in Vladescu, 2006

3.2 Population coverage and basis for entitlement

Population coverage

According to Romanian law, social health insurance is compulsory for all citizens, as well as for foreigners resident in Romania. On a voluntary basis, social health insurance can cover members of the diplomatic missions in

Fig. 3.7 Spending on pharmaceuticals 1999–2005



Source: National Health Insurance Fund, cited in Vladescu, 2006

Romania, foreigners, stateless persons and Romanian citizens resident in other countries during their temporary stay in Romania. The services included in the benefits package are accessed on the basis of a certificate that proves the contribution payment. National health insurance cards were included in the Health Reform Law (95/2006) and they have been issued since 2007. After 1 January 2007, the NHIF provided insured persons, at request, with European Health Insurance Cards, which allow them to receive necessary medical assistance during a temporary stay in a country in the European Economic Area and Switzerland. Some non-wage-earners are exempt from payment and are offered free insurance coverage, including children, persons with disabilities, war veterans, patients covered by the national health programmes and pregnant women (Section 3.3).

Many more groups than those mentioned above were given exemptions from the contribution payment by the former government between 2002 and 2004, so that by 2005 a total of 5 million people were paying insurance contributions, while 22 million were entitled to benefits. The current government by the new Health Reform Law (95/2006) decreased the number of categories with free membership, requesting contributions for some previously exempt categories (e.g. a contribution will be raised from pensioners whose income is over the pension taxation base).

To receive primary ambulatory health care services, the insured has to register with a family doctor of his or her choice. The insured is allowed to change the family doctor after a six-month period if they are not content with the services provided. The insured also has free choice of any other health care

provider (ambulatory specialists, hospital, etc.). If a person chooses a provider located in another locality, the travel costs should be covered by the insured.

Entitlements and benefits

According to the law, the insured is entitled to receive a basic benefits package that includes health services, pharmaceuticals and medical devices. Covered medical services include preventive health care services; ambulatory health care; hospital care; dental services; medical emergency services; complementary medical rehabilitation services; pre-, intra- and post-birth medical assistance; home care nursing; drugs; health care materials; and orthopaedic devices. Insured persons are entitled to medical services from the first day of sickness, or the date of an accident, until they are fully recovered.

The benefits covered by social insurance, as well as conditions for their delivery, are laid out in the framework contract (Section 4.1) elaborated by the NHIF, agreed by the Ministry of Public Health and approved by government decision. The benefits package is not established using explicit priority-setting criteria. However, the reorganization of the NHIF in 2005 included in its structure a Planning and Forecasting Centre, which will allow the use of evidence-based medicine and health technology assessments in the decision-making process (Section 4.2). However, there is little evidence that this new structure has moved towards the accomplishment of its goals.

Health care services for *prevention* or *early diagnosis of disease* that might affect the normal physical or mental development of children are covered by health insurance. Insured persons aged over 18 are entitled to a yearly medical check-up. Quarterly preventive dental services are refunded for children under 18 years of age and two check-ups a year for individuals between 18 and 26 years if they are enrolled in any form of education. Adults are entitled to preventive dental services once a year.

Insured persons are entitled to *specialized ambulatory medical services* referred by the family doctor, observing the rule of free choice of the accredited specialist doctor (Section 2.5). Ambulatory medical services include diagnostics, medical treatment, nursing, rehabilitation, drugs and health care supplies.

An insured person receives *specialized care in accredited hospitals* if ambulatory treatment proves ineffective. Inpatient care includes full or partial hospitalization with medical examination and investigations; medical and/or surgical treatment; nursing, drugs and health care supplies; housing and food. Persons accompanying sick children under three years of age or patients with severe disability are entitled to coverage of their cost of accommodation in the hospital if the doctor considers their presence necessary for a defined period of time.

The Ministry of Public Health, together with the NHIF and with recommendations from the College of Pharmacists, compiles a positive list for *prescription drugs* on a yearly basis with reference prices approved by government decision (Section 6.5). In 2005, the prescription of drugs based on their INN became compulsory, with pharmacists being required to sell the cheapest available drug within the prescribed generic cluster. The insured are entitled to health care materials needed to correct eyesight and hearing, for prosthesis of the limbs, and for other specialized health care materials on the grounds of medical prescription. The entitlement also applies to physical therapy, massage and medical gymnastics programmes. The insured are also entitled to medical *rehabilitation*, *home care* and *transportation* related to medical treatment and housekeeping support during illness or disability.

Persons insured voluntarily, on facultative basis, are entitled to a special benefit package that covers emergencies, communicable diseases with outbreak potential, mother and child care and immunizations. The uninsured are entitled to a minimum benefit package that covers emergencies, communicable diseases with outbreak potential and family planning services. In addition, all health programmes funded through the Ministry of Public Health are accessible to both insured and uninsured persons. Since 2007 the uninsured have been given the right to preventive services through the programme “Assessment of the health care status of the population through primary health care services”. This allows a free visit to a family doctor who assesses the risk based on a standard questionnaire, followed by a minimal set of lab tests.

Health insurance does *not* cover health care services for professional risks, professional diseases and work accidents (Section 3.3), selected high-technology health care services, selected dentistry services, cosmetic surgery for persons over 18, in vitro fertilization, curative health care assistance in the workplace and luxury accommodation services in hospital. The above must be paid for directly by the patients or through other sources of payment.

3.3 Revenue collection

Romania has a mix of compulsory and voluntary systems of health financing; since 1998 the dominant contribution mechanism has been social insurance. Since its inception, the importance of social health insurance expenditure has steadily increased (Table 3.2), reaching 82.5% of total health expenditure in 2003 (Fig. 3.6).

Until 1991, the main contribution mechanism to finance health care was the state budget collected by general taxation, administered by the Ministry

Table 3.2 Sources of revenue as a percentage of total expenditure on health in selected years, 1990–2004

Source of finance	1990	1995	1998	1999	2000	2001	2002	2003	2004
Taxes	100	94.7	32.4	20.5	15.1	15.2	16.2	15.4	15.8
General	100	76.7	31.8	20.0	14.8	14.6	15.5	14.4	14.4
Local	–	18.0	0.6	0.5	0.3	0.6	0.7	1.0	1.4
Statutory Insurance	na	na	64.6	75.1	77.0	80.7	79.7	81.0	82.7
External sources	–	5.3	4.2	4.4	7.9	4.1	3.9	3.5	1.4
Own income	–	–	–	–	–	–	0.2	0.1	0.1

Source: Ministry of Economy and Finance, 2007

Note: Own income represents out-of-pocket payments, donations and services provided on a contractual basis other than contracts through the health insurance funds

of Public Health and other ministries with health service provider networks. Decisions on resource allocations for the health sector were the result of an annual political process in which parliament determined the share of the state budget earmarked for recurrent and capital expenditure in the health sector. The parliament also set minimum levels of health service budget for each district. Private expenditure on health care consisted of direct payments for some drugs and some outpatient services and, to a lesser degree, informal payments. Before 1991, a total of 2% of household expenditure went towards health and hygiene (of all kinds, including cosmetics, soap and treatment in balneary (health) resorts) (Enăchescu et al., 1992).

In the early 1990s, the move toward diversifying the contributions to funding gained support within Romania as a way of increasing public resources for the health sector. In 1992, the government established a special health fund, based mainly on a 2% payroll tax but also including funds from small taxes on tobacco and alcohol sales and advertising. These funds were used for partial reimbursement of drugs prescribed in outpatient care. In 1993, responsibility for funding materials (other than drugs), utilities and current maintenance was transferred from the state to local budgets. The 2% payroll tax system operated until 1998. Since 1992, the other main source of funding has been external, consisting of loans, donations and charitable funds.

In July 1997, the Romanian Parliament passed the Health Insurance Law (no.145), which transformed the Romanian health care system from a Semashko state-financed model to an insurance-based system. The law was implemented in March 1999; in 1998, the system was in a transition period during which funds were administrated by the Ministry of Finance, the Ministry of Public Health and the (then) District Public Health Directorates (Section 2.2). During this period, the district public health directorates were responsible for paying providers, taking on the role of the DHIFs. The Ministry of Public Health acted as the NHIF and the structures under the authority of the Ministry of Finance carried

out revenue collection. Insurance funds (national and district) were set up as independent bodies on 1 January 1999 and took over the actual administration of funds in April 1999. As part of these reforms, in 1998, employers and employees each began to pay a 5% payroll tax and pensioners contributed 4% of their pensions. At the time, these contributions did not greatly affect net income, since they were deducted after a 4% rise in pensions and benefits.

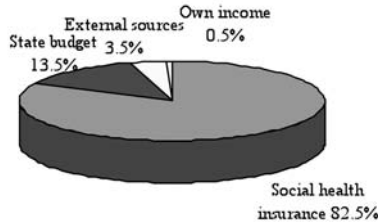
In 1999, the 10% contribution rate increased to 14% (7% from employers and 7% from employees). The self-employed, farmers, pensioners and the unemployed were also required to pay a 7% contribution to the health insurance fund, although it is difficult to estimate accurately the incomes of the self-employed and farmers. Children and young people, the disabled and war veterans with no income, and dependants of an insured person without their own income (wife, husband, parents and grandparents) were covered by health insurance free of charge. For conscripted soldiers and people serving prison sentences, insurance contributions were paid by the budgets of the Ministry of Defence and Ministry of Justice (see below for subsequent changes in the law regarding contributions).

Initially, from 1999, all the funds were collected locally by the 42 DHIFs. The DHIFs contracted services from public and private providers. The money was administered by each autonomous health insurance fund in each district and by the NHIF. In addition to the 42 DHIFs, there were two countrywide houses: one administered by the Ministry of Transportation (CAST) and one by the ministries and institutions related to national security (Ministry of Interior, Ministry of Defence, Ministry of Justice and the intelligence agencies (CASAOPSNAJ)). Fixed percentages of the collected revenues were allocated to certain activities. According to an amendment of the law, up to 25% of funds had to be set aside for redistribution among districts, which was carried out by the NHIF. In addition, 20% of all funds in 1998, and 5% thereafter, had to be set aside as reserves. No more than 5% of funding could be spent on administrative costs.

In November 2002, an Emergency Ordinance of the Government (no.150) replaced the Health Insurance Law. The new ordinance created a single national health insurance fund (the NHIF) and increased the expenditures on coverage of health services and drugs to 95% by decreasing the reserve fund to 1% and reducing the limit for the administrative costs to 3%. The contribution rate decreased from 14% to 13.5% (7% from employers and 6.5% from employees; Section 4.1 has more details).

The importance of annual budget decisions was expected to decrease with the introduction of social health insurance in 1998. This has not entirely happened because of the amendments of the insurance law that postponed elections of

Fig. 3.8 Percentage of total expenditure on health according to source of revenue, 2003



Source: Ministry of Public Health, 2004a

boards and required the approval of the NHIF budget by parliament. The budget laws of 1999 and 2000 set health insurance expenditure to 85–90% of revenues in order to create a surplus. The resulting surplus was used in the short term to reduce the deficit of the consolidated budget of the public sector. Although the surplus was transferred to the following year’s social health insurance budget, there was significant loss in real terms, because of the very low interest rates paid by the state treasury in a high inflation environment. In 2003, the budget laws set equal levels of health insurance expenditures and revenues; however, actual expenditures were higher than the current revenues as the government allowed the use of the previous years’ surplus (Fig. 3.8).

Taxes continue to be an important contribution to health care financing as the state budget retains responsibility for funding public health services and capital investments, as well as preventive activities included in high-priority national health programmes. Taxes, through different budgets (state budget, social insurance budget, unemployment insurance budget and local budgets), are also covering the insurance contributions for some population categories exempted from the contribution payment (i.e. people in military service or detention, medical leave, unemployed and people under social security benefits schemes). The percentage of expenditure covered by state budget decreased between 1990 and 2000, followed by an increase between 2001 and 2003.

Medical units earn their own income (Table 3.2) from services provided on a contractual basis (other than the contracts signed with health insurance funds), out-of-pocket payments by patients and donations.

Recent estimates of out-of-pocket expenditure of reasonable reliability are not available. The most recent individual study that analysed household survey data was from 1996 (Marcu and Butu, 1997). In this study, the data were taken from different sources and do not constitute a coherent time series for health expenditures (see section on out-of-pocket payments, below).

Table 3.3 National Health Insurance Fund income for 2004: comparison of provisions and actual income by source of funds

Sources of social health insurance fund income	Provisions (billion ROL (%))	Actual income (billion ROL (%))
Contributions	65 290.0 (96.5)	66 598.9 (96.8)
Employers	31 859.8 (47.1)	32 488.8 (47.2)
Insured persons	31 578.7 (46.6)	31 859.1 (46.3)
Other	1851.5 (2.8)	2251.0 (3.3)
Interest and other incomes	1056.3 (1.5)	657.7 (1.0)
Contributions from other budgets	717.9 (1.1)	913.2 (1.3)
Other contributions	600.0 (0.9)	600.0 (0.9)
Donations	4.6 (0.0)	4.6 (0.0)
Total	67 668.7 (100)	68 774.4 (100)

Source: National Health Insurance Fund, 2004

Note: national currency redenominated in July 2005, 10 000 ROL = 1 RON

Social health insurance

The NHIF constitutes the largest source of total health spending (82.7% in 2004 and an estimated 75% in 2007) (Table 3.2). Social health insurance contributions are the main source of revenue for the social health insurance fund (96.8% in 2004). The sources of revenue in 2004 are shown in Table 3.3. Employers and employees pay the most part of the contributions. For unemployed persons, contributions are paid from the unemployment insurance budget. Other sources are represented by interest on reserves, subsidies from other budgets for some categories exempted from the contribution payment (i.e. persons in military service or in penitentiaries, persons on sickness leave for a work-related accident or occupational disease, persons on maternity leave, pensioners whose incomes are under the pension taxation base, etc.) donations and other subsidies (Sections 2.3 and 4.1; National Health Insurance Fund 2004).

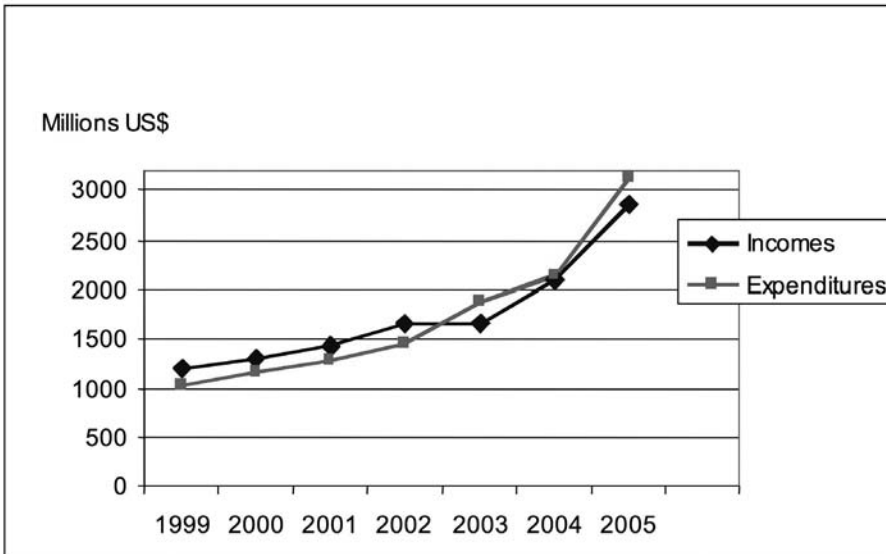
The actual contribution rates (currently 7% of employees' salaries from employers and 6.5% from employees) were set in November 2002 by the Emergency Ordinance of the Government no.150, which replaced the 1997 Health Insurance Law. It was not modified by the Health Reform Law (95/2006). The employee contribution is applied to gross income obtained from salaries, independent activities, agriculture, lettings, pensions, dividends and interests on reserves. If the income from agriculture is under the national minimum gross wage and the family does not receive any social security allowance, the contribution rate is calculated by applying 6.5% to the sum representing one-third of the minimum gross wage at national level. Contributions are paid monthly by those who receive salaries, quarterly by those whose income is

based on independent activities and agriculture, and yearly for incomes from lettings, dividends and interests on reserves.

For persons in military service, in penitentiaries or on maternity leave, the contribution is paid from the state budget. The contributions for these groups are set by applying 6.5% to the sum representing the value of two national minimum gross wages. For those on sickness leave for a work accident or occupational disease, the contribution is paid from the social security budget. For unemployed persons, contributions are paid from the unemployment insurance budget. Local budgets cover contributions for persons receiving social security allowances. For these groups, the contribution is set by applying 6.5% to the sick leave, unemployment or social security allowance.

Some additional population groups are exempt from the contributions if they do not earn incomes, such as children under 18 years, those aged 18–26 years enrolled in any form of education, family members of an insured person (husband, wife, parents without own incomes), pregnant women, persons persecuted by the communist regime or declared heroes in the 1989 Revolution, war veterans and people with disabilities (see the section on Population coverage and basis for entitlement).

Fig. 3.9 Total incomes and expenditures of the National Health Insurance Fund, 1999–2005



Source: National Health Insurance Fund, cited in Vladescu, 2006

Social health insurance is optional for members of accredited diplomatic missions in Romania, foreign citizens and stateless persons temporarily living in Romania, and for Romanian citizens resident in other countries but living temporarily in Romania.

The NHIF annual budget is proposed by the government and approved by the parliament as an annex in the budget state law. In exceptional circumstances, the fund deficit is covered by the state budget. A mismatch between incomes and expenditures has been evidenced every year, as shown in Fig. 3.9. While 1999 and 2002 incomes were higher than expenditures, expenditures began to exceed income in 2003. The peak registered in 2005 was a result of the government effort of paying pending debts from the previous years, providing a government subsidy, and also using the health insurance reserve fund.

Taxation

The State Budget Law sets the level of taxation and budget incomes, as well as the structure of the expenditure. In Romania, taxes are not earmarked for health care and a perceived lack of transparency was one of the main reasons for introducing health insurance as the main financing system.

Taxation constituted 13.5% of total health spending in 2003 (Table 3.4). The general tax-based system is used for funding national health programmes, capital investments, high-technology medical procurement, and medical institutions directly accountable to the Ministry of Public Health. This represents the Ministry of Public Health budget and does not include funds paid by other budgets as insurance contributions for exempted people categories (which is included in the NHIF income). Utilities, nonmedical supplies or current repairs are covered by local budgets.

Table 3.4 Main public sources of health financing in Romania, 1990–2000

Source of financing	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Taxes	100	100	96.9	98.3	94.7	94.7	97.7	98.3	32.4	20.5	15.1
General	100	100	80.1	60.6	61.3	58.5	62.2	62.6	27.8	17.5	12.2
Local	–	–	–	16.9	16.1	18.0	19.1	18.8	0.6	0.5	0.3
Special health fund	–	–	16.8	20.9	17.3	18.3	16.4	16.9	4.0	2.5	2.5
Statutory insurance	–	–	–	–	–	–	–	–	64.6	75.1	77.0
External loans	–	–	3.1	1.7	5.3	5.3	2.3	1.7	4.2	4.4	7.9

Source: Ministry of Economy and Finance, 2007

Earmarked payroll taxes were the main source of revenue for the special health fund, used mainly for funding drugs until 1998. This fund now consists of small taxes on tobacco and alcohol sales and advertising and it funds national public health programmes (Section 6.1).

The Ministry of Finance is responsible for collecting all taxes at local level. Tax rates are proposed by government and approved by parliament. On 1 January 2005, a progressive income tax scheme was replaced by a universal flat income tax rate of 16%. As declared by the government, the purpose of the initiative was to relax the fiscal policy in order to increase tax collection and by doing this to stimulate small and medium enterprises.

Out-of-pocket payments

Out-of-pocket payments include direct payments for goods or services that are not included in the health insurance benefit package or covered by the national health programmes (see below and Section 3.2); direct payments for private providers; co-payments charged for some medical services; the difference between the actual and the reference price of drugs; and informal payments.

Private spending on health care in 1996, estimated by a study based on the Integrated Household Survey (Marcu and Butu, 1997), was 1306 billion lei, or approximately 29% of total health expenditure. This is relatively high among European countries. An important part of this sum goes directly or indirectly to the public providers or their staff through charges for services or under-the-table payments (illegal payments to providers for services that are nominally free). Of the total private expenditure on health care in 1996, the largest identifiable share, 33%, went towards drugs (Table 3.5). The design of the Household Expenditure Survey did not allow for disaggregating the largest expenditure category, "other", which most likely was used by many respondents to indicate under-the-table payments. Although more recent assessments of the amount of

Table 3.5 Estimated private spending on health care goods and services, 1996

Item	Spending (billion ROL (%))
Drugs	435.2 (33.3)
Consultations and laboratory tests	126.4 (9.7)
Dental services	70.2 (5.4)
Prosthesis and devices	26.1 (2.2)
Other	645.8 (49.4)
Total	1306 (100)

Source: Study of health expenditure and use of health services by Romanian households in 1996 using National Commission for Statistics, Household Expenditure Survey 1996

Note: national currency redenominated in July 2005, 10 000 ROL = 1 RON

private expenses for health are not available, surveys in 1998 and 1999 indicated an increase in the use of private providers whom patients pay directly.

WHO (2002) *National health accounts data* on private health expenditure for Romania shows that private expenditure represented 34% of total health expenditure. This figure needs to be treated with caution, as under-the-table payments as well as all direct payments to private providers are not included. According to the changes in health insurance legislation, from 2002 providers had the freedom to charge co-payments for some services (see below). This would suggest that out-of-pocket payments for health services have further increased since 1996. Moreover, since the financial accounting systems have not been fully implemented, many of the private providers do not report all their incomes.

Among the services not covered by health insurance, for which patients or employers have to pay, are health care for occupational diseases, work and sport accidents, some services that require high-technology performance, some dental services, high-comfort accommodation, plastic surgery for aesthetic purposes for persons over 18 years, some drugs, some medical supplies and forms of transport, issuing of medical documents, in vitro fertilization, transplant of organs and tissues (with some exceptions), medical care by own request, the cost of certain devices used to correct eyesight and hearing and some rehabilitation treatments. Direct payments are also charged for patients who visit a specialist directly without having a referral from the family physician; the amount varies depending on the service required and the type of specialist.

Cost sharing

According to the Emergency Ordinance no.150/2002, providers are allowed to receive co-payment for some services. The objectives of introducing co-payments were to reduce inappropriate demand for health services, contain costs and raise revenue. To determine which services should have co-payments, a commission was formed by representatives of the Ministry of Public Health and of the NHIF and agreed by the CoPh then made statutory by the secondary legislation (the framework contract and its implementing norms). The yearly framework contracts and their application norms in the years following this emergency ordinance, however, did not specify a list of services for which a co-payment could be charged. Co-payments are charged by pharmacies for drugs covered partially by health insurance fund.

A highly debated initiative of introducing co-payment for hospital admissions was taken in 2003. The Ministry of Public Health argued that a small fixed charge for each admission would reduce the admission rate and would increase hospitals' budgets. Even if some categories of patients were exempted from this

measure (such as emergencies, persons without incomes and children under 18) it raised a great concern among both the public and professionals. On one hand, the level of co-payment was considered too high for poor, but sick, people, thus discouraging them to seek care. On the other hand, it was considered too small to prevent inappropriate admissions or to constitute a decent source of income for the hospitals. As each hospital's executive board was supposed to take the final decision, co-payment for admissions was never implemented.

The Health Reform Law (95/2006) maintained the possibility of providers to charge co-payments for which the Ministry of Public Health would establish the upper limits, as the national authority in pricing policy. To date an upper limit has not been defined.

Currently cost sharing is applied only for stays longer than a certain length in balneary settings. In balneary treatment settings, the health insurance fund covers 18 days, the patients pay 35% from the day tariff if they stay 13 days longer and after that period they pay full hospital day tariff; in balneary rehabilitation settings, health insurance fund covers 21 days, the patients pay 30% from the day tariff if they stay 9 days longer and after that period they pay full hospital day tariff.

For pharmaceuticals, there is direct cost sharing in the form of co-insurance (for some categories of drugs), and indirect cost sharing as reference pricing. Patients are expected to pay the difference between the actual and the reference price of drugs to encourage the use of generics and to contain costs. In addition, patients have to pay 10% or 50% of the reference price (Section 6.6). Vulnerable groups are exempt from the insurance contribution. They are also entitled to some co-payment exemption, especially for pharmaceuticals. In addition to the vulnerable groups, all pregnant women and children are entitled to these exemptions irrespective of their insurance status.

Table 3.6 summarizes the direct and indirect methods of cost sharing for health services in Romania.

Informal payments

Informal payments have existed in Romania for a long time; they are firmly rooted in Romanian culture. This culture of informal payments grew in intensity during the communist era as the socioeconomic standards of the Romanian population declined. Informal payments are estimated to account for over 40% of total out-of-pocket expenditure (Belli, 2003). In addition, a research programme on the opinion of the public conducted by the Open Society Foundation in October 2004 estimated that informal payments were more prevalent in the health system than in other sectors, such as the judicial system or public administration (Table 3.7) (Rughinis, 2004).

Table 3.6 Direct and indirect methods of cost sharing for health services in Romania

Types	Description
Direct methods	
Co-payment	Applied for long-stay care as well for some ambulatory services that health insurance fund does not fully reimburse
Co-insurance	Cost sharing in balneary settings where patients pay 30–35% of the day tariff can be regarded as co-insurance; some categories of pharmaceuticals (10% or 50% of the reference price)
Deductible	Not applicable
Indirect methods	
Extra billing	Some private providers use extra billing for ambulatory services
Reference pricing	Used by the National Health Insurance Fund within its drug compensation system
Out-of-pocket maximum	Not applicable
Benefit maximum	Not applicable

The frequency of informal payments in the health sector was found to be higher in urban areas. This difference may reflect the need to personalize an informal relationship in urban areas, while in rural areas the personalization is facilitated by mutual acquaintance. The nature of these payments varies between cash, presents or services. The Open Society Foundation study (Rughinis, 2004) found that informal payments were seen as “legitimate” by 25% of respondents in rural areas and by 33% in urban areas. However, informal payments were considered a form of corruption by 62.7% if they were offered by the patient and by 97.3% if they were requested by health professionals.

In 1999, the Centre for Health Policies and Services began conducting periodical surveys on population opinion on the health sector reform. In addition to satisfaction with health services (Section 2.5), the 2005 survey also addressed informal payments (Centre for Health Policies and Services, 2006). Of those interviewed, 18% declared in 2005 that they paid informally for health services, which represents a reduction from 2002 (35%). Among those aged 55 and over, 22% reported making an informal payment, compared with 17% of adults aged 35–54 and 15% of those aged 19–34 years. Income level does not

Table 3.7 Percentage of survey respondents reporting informal payments

Destination of informal payments	Rural residence (%)	Urban residence (%)
Health system	33.6	40.6
Juridical system	15.0	19.0
Public administration	5.4	11.4

Source: Rughinis, 2004

appear to play a significant role. Subjects were also asked about the reasons why they made informal payments. The following reasons were described: 55% reported informal payments are customary; 32% believed they would receive better care; 29% reported gratitude; 21% stated they would guarantee better future relations with the doctor; 18% stated they would guarantee better care from the nurse; 15% paid for prompt treatment; 7% paid for better drugs; 4% paid for auxiliary benefits; and in 3% the payments were requested by the health staff. The size of the informal payments was distributed as follows: 10% of the subjects paid over US\$100, 18% paid US\$30–100, 22% paid US\$10–30 and 34% paid less than US\$10.

Voluntary health insurance

Until 2004, private health insurance was offered only to employees of some foreign or partly foreign companies operating in Romania. It was also used by Romanian residents travelling abroad, since compulsory health insurance did not cover the cost of services for travellers outside Romania, except in the few countries with which Romania had bilateral agreements.

In 2004, the Private Health Insurance Law (no. 212) was issued, but the implementation procedures were never elaborated. This law was replaced by Chapter 10 on Voluntary Health Insurance of the Health Reform Law (95/2006).

According to the new law, private insurance companies are permitted to offer two types of voluntary health insurance: supplementary or complementary. Complementary insurance covers fully or partially the co-payments charged by providers for the services included in the basic benefit package offered by social health insurance. Supplementary insurance covers fully or partially the services not included in the basic benefit package offered by social health insurance, the request for a second medical opinion and high-comfort accommodation. Those who are opting for voluntary health insurance are not excluded from participating in statutory health insurance scheme. Indeed, in order to be eligible for supplementary and complementary voluntary health insurance, the applicant must pay the contribution to the statutory health insurance for the basic package of services. Voluntary health insurance can be purchased individually, or by employers as a health benefit for their employees. There are no available data on the proportion of the population covered with voluntary health insurance or on the proportion of individual versus employer-based coverage. The insurer can request a medical check-up before enrolling the applicant in order to establish his/her risk category and then a package is offered in accordance with the individual risk. The premiums are risk related and are not regulated.

The basic package of benefits within the statutory health insurance system is very broad, a fact that leaves very few services to be covered by voluntary health insurance regardless of whether it is supplementary or complementary. Companies providing voluntary health insurance see this situation as an obstacle for their development.

The Ministry of Public Health and the Insurance Supervisory Commission regulate the activity of the voluntary health insurance (for-profit) companies. The Insurance Supervisory Commission is an independent authority that actively seeks to protect the insured individuals' rights and to promote a stable environment for the Romanian insurance market.

Parallel health systems

The Ministry of Interior and Administrative Reform, the Ministry of National Defence, the Ministry of Transport, Communications and Tourism, the Romanian Intelligence Services and the Ministry of Justice own and operate health systems in parallel to the Ministry of Public Health. The medical services provided within these systems are paid by health insurance. In 1998, two special health insurance funds were set up (also part of the national social health insurance system): the health insurance fund for the employees of the ministries and agencies related to national security (CASAOPSNAJ) and the health insurance fund for the employees of the Ministry of Transport, Communications and Tourism (CAST).

Until 2002, the health insurance contributions were collected at DHIF level (including the two special houses). The establishment of the two special houses has been highly criticized for targeting socioprofessional categories with low risk and high income in relation to the national average, thereby altering the solidarity principle. For example, in 2000, the average income per insured person was almost three times higher in the CAST and 30% higher in CASAOPSNAJ than the average for the DHIFs. This was of particular concern during the period that insurance premiums were collected at the district level, since the lack of national pooling also increased inequity. The establishment of the two parallel health insurance funds had a negative effect not only on the public system, by decreasing revenue for the DHIFs and increasing the average risk of their insured, but also on the insured persons covered by the two houses, since their access to health care services was restricted. The 2.2 million people covered by the parallel health insurance funds cannot be treated or checked free of charge in the "civil" system as they are subject to agreements signed by the respective insurance funds (Vladescu et al., 2005).

Another criticism regarding the establishment of the two parallel health insurance funds was related to the impairment of the decentralization principle.

Within the parallel systems, there is no decentralization; rather there are closed systems of command and control. Furthermore, there is no transparency regarding resource distribution in the parallel system; the lack of such data makes it difficult to evaluate the efficiency and effectiveness of the whole health system (Vladescu et al., 2005).

The Health Reform Law (95/2006) states that from 2007 the two parallel health insurance funds will be reorganized and privatized. Until the reorganization, the two houses would continue to function following the same principles on which the activity of the DHIFs is based.

External sources of funds

Considerable external sources of funding are provided by international organizations, through bilateral and multilateral support and private sources.

To stop the deterioration of medical assistance and to start its rehabilitation under Law 79/1991, the Romanian Parliament approved a loan from the World Bank. The World Bank project started in 1992 and involved a loan of US\$150 million. Originally designed to terminate in June 1996, it was extended for three years and ended on 30 June 1999. The project sought to rehabilitate primary health care services and finance the first steps of health sector reform.

In June 2000, the World Bank approved a further US\$40 million Health Sector Reform Project loan for Romania. This was the first of a two-phase adaptable programme loan totalling US\$60 million that the Bank provided over the next five years to support the government in implementing key elements of a wider long-term health sector development strategy and reform programme. The components of the project focused on planning and regulation of the health care delivery system, upgrading essential services in district hospitals, primary health care development, emergency medical services, public health and disease control, and project management.

In 2002, the Government of Romania received a loan from the International Bank for Reconstruction and Development to support the institutional building process of the private and public sector in the general reform process of Romania. Part of the loan was allocated to assist the Ministry of Public Health to prepare a study on health financing, which offered information on health financing to decision makers to support the general health care reform process.

The health sector also received funds from the EU through the PHARE Programme for Health. This had originally allocated approximately €25 million in 1991 for laboratory equipment, dispensaries, drug supply and training, of which only 16.5 million was used owing to low absorption capacity. The

capacity to utilize external resources started to increase in 2005 once the accession process accelerated and an accession deadline was established.

In 1997, three new PHARE programmes were approved for the health sector, with a total amount of €4 million: €1 million for institutional reform (support for the implementation of the Health Insurance Law); €1.5 million for drug and blood products reform; and €1.5 million for the reorganization of public health administration. All these programmes were completed in the year 2000. In addition, a consensus programme supporting the implementation of health insurance legislation was approved in 1998, with a total value of €155 000.

Between 2000 and 2004, further PHARE programme funding has allocated around €23 million for the following five projects: communicable diseases, HIV/AIDS, noncommunicable diseases, water safety and occupational health.

Under the Stability Pact Project, Romania received €38 000 for four projects: mental health, food safety, transfusion safety and epidemiological surveillance.

In 2003, the Ministry of Public Health received two non-reimbursable credits from the Global Fund to fight AIDS, tuberculosis and malaria (US\$21.8 million for HIV/AIDS and US\$16.87 million for tuberculosis).

Romania has had several bilateral agreements with different governments for specific forms of cooperation and financial aid in health. America (USAID), Britain (DFID), Japan (JICA) and Switzerland (SDC) are some of the most active donors in this area. UNICEF has been involved in four programme areas: women and children's health; family education; children in especially difficult circumstances; and planning, social policy development and advocacy. UNFPA has supported the strategy on reproductive health and interventions in the frame of *Making Pregnancy Safer*. In the same way, UNAIDS has supported public campaigns that aimed to increase awareness about HIV/AIDS as well as the process of increased access to antiretroviral therapy. The last was supported also by WHO, together with other technical support in the fields of making pregnancy safer, noncommunicable diseases, surveillance of communicable diseases and pharmaceuticals.

Other sources of financing

National Insurance Fund for Work Accidents and Occupational Diseases

Established and regulated by Law 346/2002, the National Insurance Fund for Work Accidents and Occupational Diseases is funded mainly by contributions paid by employers and by employees (in case of self-employed persons, persons that gain income from independent activities, persons working for international

organizations, and persons working in agriculture or forestry). This fund pays for medical care, transport, medical devices, rehabilitation, and “balneary” treatments (in health resorts). The fund also pays sickness allowances during temporary incapacity for the insured persons.

According to this law, all employed persons are covered by the insurance, including apprentices. However, persons working under certain national enterprises and ministries, such as the Ministry of National Defence, Ministry of Justice, Ministry of Administration and Interior, Romanian Intelligence Service, Foreign Intelligence Service, Security and Protection Service, and Special Telecommunications Service are insured against work accidents and occupational diseases by their own systems (Section 3.5).

Voluntary and charitable financing

Significant activity by nongovernmental organizations (NGOs) activity in many health areas, including orphanages and services for people infected with HIV, are financed by foreign donor agencies. For example, the Soros Foundation invested more than US\$3 million in the Romanian health sector between 1996 and 2000. Since 1991, the health sector has received credits from various corporations (e.g. Siemens, General Electric, Labsystem, Nucletron). These funds have been used for buying high-performance technical equipment. From 2004, according to the Fiscal Code, taxpayers may allocate 1% of their income tax contributions to an NGO. Since 2005, the percentage has increased to 2%. Therefore, a greater participation of taxpayers in sponsoring NGOs and a greater involvement of NGOs in health care activities is expected.

Long-term care financing

The main financing sources of the institutions providing medical long-term care are the NHIF, the state budget and local budgets. The NHIF covers health services; the state budget through the Ministry of Public Health pays for investments, and funds from local budgets cover the maintenance expenditures.

For the institutions providing both social and medical care, the main sources of financing are out-of-pocket payments, the state budget, NHIF and local budgets. The level of out-of-pocket payments made by the clients is set by local authorities that own these institutions. Investments are covered by the state budget through the Ministry of Labour, Social Solidarity and Family and maintenance expenditures are covered by local budgets. The NHIF pays these institutions a global budget consisting of money for medical staff salaries and a

sum to cover drugs and medical supplies based on the previous year's allocation adjusted for inflation (Section 3.6).

Financing mental health promotion and care

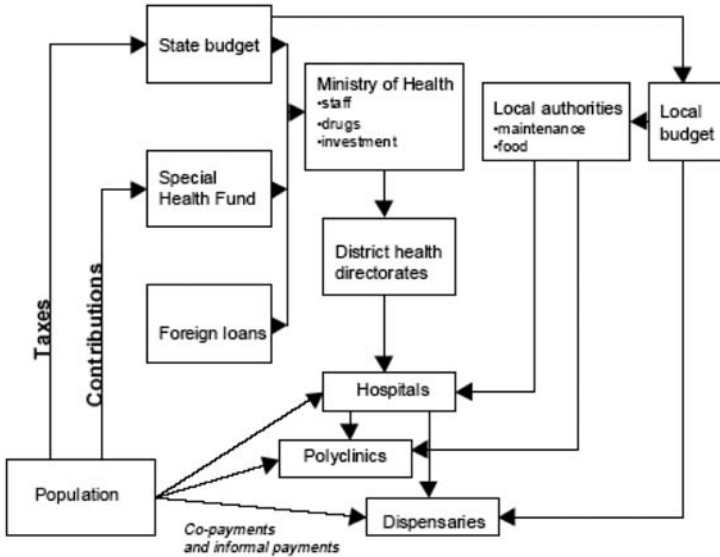
In 2002, an estimated 3% of total public health funds were allocated to mental health. The Ministry of Public Health allocated 12 billion lei (US\$375 000) out of the 8185 billion lei received from the state budget to the National Programme for Mental Health and Prophylaxis in Psychiatric and Psychosocial Pathology, while the NHIF allocated 1730 billion lei (US\$54 million) out of 53 290 billion lei (Section 6.10; WHO, 2000a). Mental health is not financed any differently to general health care. Mental health care providers are funded by the social health insurance system. The Ministry of Public Health ensures funds for investments and finances the National Programme for Mental Health and Prophylaxis in Psychiatric and Psychosocial Pathology. The NHIF also contributes to the financing of this programme, paying for drugs and medical supplies. Other financing sources are local budgets, which pay for repairs and maintenance of hospitals, and NGOs, which attract external funds for mental health projects.

3.4 Pooling and allocation to purchasers

Decisions on resource allocations for the health sector result from an annual political process in which parliament determines the share of the state budget earmarked for recurrent and capital expenditure in the health sector. Until 1996, the parliament also set minimum levels for each district's health care budget. After 1998, with insurance contributions making up the largest part of expenditure, the importance of parliament decisions on the annual budget was expected to decrease. However, the overall public health budget (including the NHIF budget) is still annually set by the government and approved by the parliament through the budget state law. The provisions on the expenditures at national level are still established by parliament and stated in the state budget law. The budget levels for each district's health care is currently set by the institutions at central level (Ministry of Public Health, NHIF) on the basis of proposals made by the districts (DPHAs, DHIFs) (Section 2.4).

Until 1998, funding of health care was input oriented, based on line item budgets, with no possibility of shifting allocations among the main expenditure categories (personnel, material and capital). Allocation of funds from the Ministry of Public Health to the district health directorates and from district health directorates to hospitals and other providers was based on historical

Fig. 3.10 Financial flow chart of the Romanian health system before the introduction of social health insurance



criteria; namely the distribution of resources (staff, beds) and past utilization data (Fig. 3.10). The only major change in financial planning was the establishment of national health programmes with separate budgets within the Ministry of Public Health budget in 1994 (Section 6.1).

Since 1998, the national budget for health care has two major sources: the state budget and the NHIF, with the latter representing more than two-thirds of the total health care budget (Fig. 3.1 and Section 3.3).

The Ministry of Public Health is responsible for administering the state health budget. State funding for health is earmarked for specific purposes before distribution to the Ministry of Public Health and to the other ministries with health networks. Funds that are allocated to one spending category cannot be transferred to another. The Ministry of Public Health allocates funds to the DPHAs and to its devolved units mainly on an historical basis. The money allocated to the national public health programmes is distributed to different institutions according to their responsibilities in programme implementation. Capital investment projects are decided at Ministry of Public Health level on the basis of proposals submitted by districts.

The financial basis of the social health insurance system is made up of a mandatory insurance contribution of 13.5% (7% paid by the employers and 6.5% by employees; Sections 3.2 and 3.3). The NHIF annual budget is proposed by the government and approved by the parliament as included in the budget state law.

The main bodies responsible for collecting social health insurance contributions were the DHIFs (including the two special health insurance funds) until 2002. This absence of national level pooling of contributions had the effect of increasing inequity. As the socioeconomic profile of the insured differs between district areas, it was difficult to reach an equitable redistribution of funds. In the case of the two special funds covering specific socioprofessional categories with high income and at low risk compared with the national average (CASAOPSNAJ and CAST), a study in 2000 (Vladescu et al., 2005) showed that even after contributing 25% to the redistribution fund, the budget surplus of these special health insurance funds was 30% higher than the surplus of all the other DHIFs together and represented 57% of the total excess in the insurance system.

Since 2002, the contributions have been collected at the national level by a special body under the Ministry of Finance authority (Fiscal Administration National Agency), and DHIFs have raised contributions only from insured persons directly paying the whole contribution (such as the self-employed). The NHIF allocates money to the DHIFs in accordance with a formula based on the number of insured persons and the mix of population risks (Government of Romania, 2000).

The parallel health insurance funds CAST and CASAOPSNAJ have the same positions and roles as DHIFs for money flow. The contributions of their insured are collected by the Fiscal Administration National Agency and pooled together with the other health insurance contribution into the NHIF. The NHIF distributes the funds to the DHIFs (including CAST and CASAOPSNAJ). Section 3.3 discusses (under *Parallel health systems*) the effect on national pooling of the establishment of parallel health systems.

3.5 Purchasing and purchaser–provider relations

The series of regulations passed in the 1990s changed the structure of the health care system and established the legal framework for the shift from an integrated, centralized, state-owned and state-controlled tax-based system to a more decentralized and pluralistic social health insurance system, with contractual relationships between health insurance funds as purchasers and health care providers.

The NHIF budget covers ambulatory (primary and specialist), inpatient and dental care, including clinical preventive services and drugs. From these funds, health care providers finance all expenses related to service delivery except for

capital investments, which, according to the law, are the responsibility of the Ministry of Public Health. Resource allocation among different types of care (primary health care, ambulatory care, inpatient, etc.) is proposed by the NHIF and the Ministry of Public Health and approved by the annual budget law.

Payment for services is shifting away from funding based on input costs. A yearly framework contract, agreed upon annually by the NHIF and the Ministry of Public Health and approved through a governmental decision, defines the benefits' package, conditions for service delivery and payment mechanisms. The implementation of the framework contract is monitored at both NHIF and DHIF level by special departments. Besides monitoring, other departments in these institutions are charged with periodical overview of providers in order to check compliance with the services contract provisions (in terms of both volume and quality). The framework contract sets the sanctions and contraventions for each type of failure in performing the obligations under the contract, for both parts: DHIF and service provider. The same rules of contracting apply to both public and private providers, though there is no real competition, and usually DHIFs sign contracts with all providers in the district. According to the law, reimbursement varies by provider groups (Section 3.6 and Fig. 3.1):

- capitation and fee for service for primary health care;
- fee for service for specialized ambulatory care;
- a mix of payment methods including activity-based budgets and case payment and negotiated tariffs for certain services in hospitals; hospitals sign contracts with the DHIF through their legal representatives.

The NHIF also contributes to the financing of the national public health programmes, paying for drugs and medical supplies (Section 6.1). The money allocated to these programmes is distributed to different institutions on a contractual basis.

Family doctors represented the first group of physicians in the Romanian health care system to move from being state employed. In accordance with the legislation, once they are accredited and in contractual relationships with the DHIFs, there is no distinction between public and private family doctors. Ambulatory specialists have also become independent practitioners, having the freedom to make contracts with DHIF individually or as group practices. Payment for all hospital physicians is provided, directly or indirectly, by the DHIFs on a contractual basis. Details of these contracts are elaborated in Section 3.6.

When the social health insurance system was implemented, dispensaries, which formerly belonged to hospitals both in an administrative and financial sense, were transformed into “medical offices”, in other words independent and

autonomous units managed by one or a group of primary health care physicians, in accordance with specific legislation.

3.6 Payment mechanisms

Paying for health services

The main institutions that provide public health services (Ministry of Public Health, DPHAs, institutes and centres of public health) are paid through global budgets. These institutions can also earn and administrate their own incomes generated from direct payments charged for services, revenue from the sale of goods or renting space, and 50% of the fines from sanitary inspection of health facilities and other units that have to maintain specific sanitary standards. Public health services provided under the national public health programmes are financed from the state budget and from the health insurance fund, which pays for drugs and medical supplies (Section 6.1).

- Primary care services are paid by a mix of per capita and fee for service. The services provided by specialists in ambulatory settings, including dental care services, are paid fee for service (see below).
- Hospitals receive prospective payments consisting of a mix of payment methods. The total value of the contract signed by hospitals is composed of:
 - case payment: either DRGs (case payment by diagnosis, currently in 276 acute care hospitals) or based on a flat rate per case (around 230 inpatient care units);
 - a budget calculated on the basis of the number of estimated cases, the optimal length of stay and the negotiated tariff per day (for hospitals or hospital departments that provide long-term care and rehabilitation services);
 - a sum dedicated to the national public health programmes (to cover drugs and medical supplies as well as the emergency care for patients where the amount exceeds that covered by the case payment);
 - payment for hemodialysis services on the base of negotiated tariff;
 - payment for services provided by the outpatient departments of the hospitals, consisting of fee for service (paid from the budget dedicated to ambulatory care);

- payment for ambulatory laboratory tests provided, calculated by multiplying the estimated number of services by the negotiated fee for service;
- payment of services provided as day cases, calculated by multiplying the number of services by the negotiated tariff.

The DRG payment system started on a pilot basis with one hospital in 1999, followed by an extension of the pilot to 23 hospitals between 2000 and 2002, then rolled out to 185 hospitals in 2004, and 278 in 2005. The current DRG system has not yet been evaluated.

Over and above the listed payments, hospitals can charge direct payments for “high-comfort” accommodation.

Medicosocial care units (nursing homes for people with social dependency and chronic diseases) were until recently funded by social health insurance by global budgets, consisting of staff salaries and a sum to cover drugs and medical supplies based on the previous year’s allocation adjusted for inflation. From 2007, these payments will be supported by the Ministry of Public Health. Costs for maintenance and functioning of these units are covered by local budgets at district level.

The sum contracted by health insurance funds with emergency units consists of:

- payment of transport services, calculated on the basis of the number of estimated kilometres, number of hours of flight or number of marine miles and the negotiated tariff per kilometre/hour per mile;
- payment of medical services, calculated on the basis of the number of calls and the negotiated tariff per call.

Emergency care is financed from state budget (Ministry of Public Health and Ministry of Administration and Internal Affairs) and from health insurance funds as mentioned above. State budget covers mainly the investments but it can cover also the costs of complicated emergency situations that exceed the case payment.

Home care services are reimbursed by fee for service. Rehabilitation services provided by sanatoriums are paid by global budgets established on the basis of the number of inpatient days and the negotiated tariff per day. For balneary treatment, the patients share 30% of the tariff per day for length of stays up to 18–21 days. For balneary rehabilitation services, the patients share 25% of the tariff per day for length of stays up to 21–30 days. The patients pay the total cost for length of stays over 21 days and 30 days, respectively, and for extra referral admission. Rehabilitation services provided in ambulatory settings are paid fee for service.

Paying health care personnel

Until 1994, all health care personnel were paid by salary. This was one of the main reasons for discontent among health professionals. On one hand the salaries were very low, and on the other hand this payment method did not provide any incentive to improve performance. The first change in the payment system was piloted at the primary care level between 1994 and 1998 in eight districts, when GP salaries were replaced with a mix of weighted capitation and fee-for-service payment. At present, payment for medical staff varies, depending on the sector, as described below.

Public health professionals are paid by a salary established by law following consultation with trade unions. The salary of public health professionals trained as medical doctors is usually higher than the salary of other professionals working in public health. This is an important reason why other specialists (economists, information technology specialists, engineers, sociologists, etc.) are not attracted to public health.

Doctors working in the Ministry of Public Health and DPHAs in public health functions are not content with their status as civil servants; they feel that they are not treated with the same respect as other colleagues working as clinicians. As civil servants, they are not permitted to practise medicine and they risk losing recognition of their professional competence after five years of not practising their profession. This limitation for practising medicine has a negative impact on their incomes and on their medical professional development.

In primary health care, family doctors are paid a mix of age-weighted capitation (85% for 2005–2007) and fee for service (15%) for some curative, preventive and health-promotion services such as immunization, monitoring some chronic diseases, and mother and child surveillance. Both the number of patients and the services provided are calculated in points. In order to avoid fraud and to ensure the quality of services provided, thresholds have been established for the number of points and the number of registered patients. If the total number of points for the registered patients per year is over 23 000 or the number of registered patients is over 2000, the number of points over this threshold will be reduced by 75%. In rural areas, the threshold is 35 000 points for the registered patients per year. Family doctors that reach an immunization level higher than 95% are paid, as a bonus, a double number of points for the additional immunizations. The total number of points is adjusted according to professional degree and working conditions in order to encourage professional development and to attract doctors in isolated areas. New family doctors receive financial incentives for opening a practice.

From 1999, the payment of specialists in ambulatory services has been based on a fee-for-service schedule that relies on a points system. As for primary

care doctors, the number of points is adjusted by the working conditions and the professional degree. One point has the same value all over the country. Every year, the framework contract establishes the number of points that will be allocated for each type of service as well as for capitation (in this case the number of points varies between age groups). The minimum value of a point is established every year through the same framework contract. This means that a provider cannot receive less than a guaranteed minimum value of the points, but on quarterly bases the value can increase based on the funds available for the respective quarter and number of points cumulated.

The fee-for-service system used for ambulatory specialists and family doctors is based on a list of services included in the framework contract, with defined reimbursement rates per service based on the number of points allocated to each service.

The health insurance budget available and total number of points for the services delivered by all providers in any three-month period determine the monetary value per point and, thereby, the actual reimbursement per service. More services delivered mean lower point values and, hence, lower reimbursements per service. The total budgets for different types of care are separate and their relative sizes are determined in advance. Consequently, the point value is different for family doctors and specialists.

Physicians in ambulatory settings trained in non-clinical specialities, as well as dentists, are paid by fee for service expressed in prices, not points. Complementary and alternative medical practitioners (those involved in acupuncture, homeopathy, herbal medicine, etc.) are also paid fee for service.

Physicians in ambulatory units are allowed to receive direct payment for services required by patients without a referral, excepting emergencies and certain conditions for which, by regulation, a referral is not necessary. Direct payments can also be charged by dentists, as well as by complementary and alternative medical practitioners.

Hospital staff continue to receive salaries determined through governmental decision. Managerial staff at all levels receive a management allowance. Nurses at all levels are paid by salary in both public and private health care facilities.

Pharmacists are paid by salaries within hospital pharmacies. Community pharmacies generate revenue through sales and pay their staff by salaries. Salary negotiation takes place only in the private sector on an individual basis, where the level is guided by the market. In the public sector, salary negotiations occur at national level by the trade union and the level is set by government decision. Salaries in the public sector have increased over recent years, but still there is a large sense of dissatisfaction among health professionals.

4 Regulation and planning

Developments in health policy reflect the changing structure of Romanian society after the revolution of December 1989. Among the main factors that influenced health policy development change were the appearance of new social structures and processes, partial introduction of capitalist relations, market systems and liberal democracy, the measures imposed by the EU accession process and international funding agencies.

Since the mid-1990s, the Romanian health system has been influenced by a great number of political participants (Section 7.3). Among these, a strong interest group has been the physicians. After 1989, as before, the physicians have wielded great political power, especially as individuals, occupying the majority of decision-making positions. In 1996, physicians organized themselves into a formal interest group, the CoPh, that has played an important role in policy-making. However, the main actor in policy development is the state through its institutions: the Ministry of Public Health and the NHIF at the central level, and the DPHAs and the DHIFs at the local level.

4.1 Regulation

The Romanian health care system turned from an *integrated model*, in which health care providers were directly employed by the Ministry of Public Health, to a *contract model* in which health care providers in the curative health system are independent and are in contractual relationships with the health insurance funds. Individual contracts are based on the so-called framework contract, which is elaborated by the NHIF, agreed by the Ministry of Public Health and approved by a government decision order.

In a formal constitutional sense, the parliament has a key position in the policy process. Some major health reform laws have been passed in parliament, but their content has been heavily influenced by the party in power, the Ministry of Public Health and, after 1999, the NHIF. Major legislation in health has been issued by the government through Emergency Ordinances, bypassing the parliament (Section 7.1).

The Ministry of Finance plays a key role in decisions regarding health reform measures, as any policy document that involves the expenditure of public money requires its technical approval. Thus, the Ministry of Finance has been in a position of substantial influence for the budget approved by the parliament for the NHIF in recent years. There are other ministries that are also involved in policy-making, such as the Ministries of Labour, Social Solidarity and Family; Transport; Defence; Interior; and Justice, and the agencies related to national security. These have their own health care systems with separate health care facilities (hospitals, polyclinics, dispensaries).

Regulation and governance of third party payers

The third party payers in Romanian health care system are the 42 DHIFs (including the Bucharest health insurance fund), plus the two separate funds: one for people hired within the transport system (CAST) and one for people working in military, police and intelligence structures and judicial system (CASAOPSNAJ) (Section 2.3). They are all decentralized units of the NHIF.

Until 2002, the DHIFs collected health insurance premiums, being entitled to retain 75% of the collected funds at local level and sending 25% to the redistribution fund. Since then, contributions have been collected by a special body under the Ministry of Finance at national level, and DHIFs have raised contributions only from insured persons directly paying the whole contribution (such as the self-employed). The NHIF allocates money to the DHIFs in accordance with a formula based on the number of insured persons and the mix of population risks (Section 3.4).

The Ministry of Finance has an important role in influencing purchase of services by defining expenditure ceilings. The activity of DHIFs is monitored and controlled by the NHIF through a special department according to a control and monitoring plan. In order to increase the performance at local level, since 2005, the presidents of the DHIFs have to sign a management contract with the NHIF that includes a management plan. The managerial activity of the presidents is evaluated by measuring the achievement of the objectives and performance indicators enclosed in the management plan developed yearly. They then receive further payment based on the degree they reach with these

objectives and the level of performance indicators. For poor performances, the presidents of the DHIFs can, theoretically, be dismissed.

Regulation and governance of providers

The provision of health care services in Romania occurs at three main levels:

- primary health care: delivered by family doctors who are independent practitioners contracted by the health insurance funds but operating from their own offices, very rarely organized in group practices;
- secondary care: delivered in hospitals and in ambulatory settings through the network of hospital outpatients departments, centres for diagnosis and treatment and office-based specialists;
- tertiary care: provided in teaching hospitals and specialized hospitals.

Most of the secondary and tertiary health care facilities are publicly owned and are under state administration (Chapter 6). Private providers are permitted to enter into contracts with the health insurance funds, but their number is very small.

In practice, there are some market entry restrictions for secondary and tertiary care that are described by the framework contract. They refer mainly to professional competence and endowment. In primary care, the main restriction is represented by the minimum number of patients (1000) a family doctor must enlist in order to entry in the market.

The Ministry of Public Health develops the legal framework in which health providers (both public and private) function. There are specific technical norms for organization and functioning of the medical units, including staffing and budgeting norms. The Ministry of Public Health establishes the number of hospital beds required at national level and recommends to the government the opening or the shutting of public hospitals. Providers have to be authorized by the Ministry of Public Health to function. Only physicians are currently accredited by the CoPh. The professional associations (CoPh, College of Pharmacists, College of Dentists and Romanian Order of Nurses and Midwives) have roles in setting regulations of their professions. According to the Health Reform Law (95/2006), hospitals will be accredited by a national Hospital Accreditation Commission, which is in the process of being established.

The internal audit unit in the Ministry of Public Health oversees and evaluates audit in medical units. The intention of the Ministry of Finance is to move increasingly towards performance audit, giving greater emphasis to the “consultant” function of auditors. This will require the development of performance measures and benchmarks to assess performance of units. The

Ministry of Public Health has already started to do this, with indicators being developed for hospitals measuring both economic and medical efficiency; however, it has not yet been implemented (World Bank, 2002). In order to improve hospital performance, hospital managers will be evaluated by measuring the achievement of the objectives and performance indicators enclosed in a management plan attached to the working contract.

Regulation and governance of the purchasing process

An essential element of the Romanian health care reform was the move from a hierarchical highly integrated service delivery and finance to purchaser–provider separation and use of contracting mechanisms. Contracts were first introduced during an experiment conducted between 1994 and 1997 at the primary care level in eight pilot districts (Section 7.1), intending to exercise the purchaser–provider split. Funds for dispensaries were no longer allocated by hospitals but provided by DPHAs on a contractual basis. The introduction of the health insurance system in 1999 extended the contractual relationship between third party payers and providers to all districts and all care sectors. Unfortunately, the excessive control over expenditures exercised through the budget process (outside the health insurance funds) reduced the ability of the districts to develop stable, rational funding agreements with providers.

The existence of a budgetary surplus in the health insurance system for several years led many providers to develop mechanisms to deal with claims on that surplus, including arrears in building payments (World Bank, 2002). Only in 2005 were measures taken for using contracts as a cost-control mechanism. For example, the existing regulation for contracts between DHIFs and pharmacies has been reinforced by setting mechanisms that prevent pharmacies from selling drugs over the agreed contract value. Incentives (such as receiving supplementary funds; Section 6.6) have also been set for health service providers to reduce prescription of drugs over the amount stated in the contract signed with DHIFs.

Regulating quality of care

The Health Reform Law (95/2006) established that the Ministry of Public Health and the NHIH are responsible for establishing quality criteria for care provided to insured persons. All health care providers who have signed contracts with health insurance funds must adhere to these criteria (Ministry of Public Health, 2007a).

Quality of care is not regulated by a specific act, but Law 95/2006 includes some references to quality of care in each precise sector of the health care system (e.g. hospitals, laboratories, primary care facilities). For instance, it specifies that hospitals need to get accreditation based on standards that are elaborated by the Ministry of Public Health.

The key health policies established in 2000 and revised in December 2001 formally sought to:

- improve hospital performance and increase accessibility to hospital services
- increase access to high-quality, effective and safe drugs
- improve health financing and assuring system sustainability
- improve health status of mothers, children and the family.

Moreover, the Romanian Government Programme 2005–2008 aims to fulfil in the health sector the following priority objectives:

- effective and equal access of citizens to basic medical care
- increase of life quality by improving the quality and the security of medical act
- approach of health and demographic indicators of civilized countries, at the same time decreasing the pathology specific to underdeveloped countries.

The following strategies are outlined.

- For the purpose of increasing the quality of medical cares, the Romanian Government will encourage the competition within the health sector.
- To increase the quality of medical act, the preponderantly coercive and punitive measures aiming at the medical staff will be removed, and there will be created an administrative and legal framework to stimulate and reward them in order to fulfil some contracted objectives and quality indicators.

Improving the institutional framework is regarded as an essential step towards better quality of health care. In this regard, the role of the Ministry of Public Health was redefined in accordance to the following main attributions (Government of Romania, 2004): “elaboration of medical general policies, elaboration and management of health programmes, assuring the control of the medical services quality through the Public Health Departments and the Institutes of Public Health, elaboration of the standards specific to medical field, assuring the urgency medical assistance, granting equipments to hospitals within territory, collecting and disseminating the information, coordination of negotiations and promotion of the framework agreement upon granting the medical cares within the system of health social insurance, approval of minimum

and recommended tariffs that can be used within the social system of health cares, sustaining the medical research and education; financing the unexpected expenditure caused by situations such as: natural disasters, epidemics, regulating the access to various forms of social protection.” In this context, the Ministry of Public Health initiated a process of drafting a specific regulation on quality of care and health care quality management expected to be proposed for public debate in 2008.

Elements of quality are to be found in different regulations issued by the Ministry of Public Health, but in the absence of a dedicated or individualized quality assurance framework it is difficult for authorities to evaluate and assess properly the quality of care. However, owing to the specific roles and responsibilities of the Ministry of Public Health in connection with standard and criteria setting, several commissions and committees are coordinated by the Ministry of Public Health. The most important ones are those related to accreditation of hospitals and accreditation of health care providers that are contracted by the insurance fund. The hospital accreditation commission is organized at national level, while the primary/ambulatory care providers are accredited locally (district level). Membership of the commissions is set by four main four participants: the Ministry of Public Health, the CoPh, the College of Pharmacists and the Romanian Order of Nurses and Midwives. In addition, the presidency, the government and the Romanian Academy are represented on the national commission for hospital accreditation.

The implementation of the framework contract is monitored at both NHIF and DHIF level by special departments but with main focus on the compliance with the services contract provisions (in terms of both volume and quality). The same rules of contracting apply to both public and private providers. In practice, what is thoroughly controlled by the health insurance funds are mostly the financial aspects and volume of services provided and less emphasis is on quality aspects.

The CoPh is involved in quality evaluation but mainly in cases of claimed failures involving physicians. In a similar situation involving hospitals and primary care providers, the Ministry of Public Health also conducts an investigation.

The Ministry of Public Health approves the installation of high-technology equipment in public hospitals. Technology has to be registered with the Ministry of Public Health, but the registration requires only proven safety and effectiveness, without a review of cost-effectiveness. The capital cost of such equipment is paid for by the state budget for all public hospitals. It should be noted that a large majority of the ambulatory sector is private owned.

A recent study asked patients whether they felt that quality of care, accessibility and professional attitudes had changed during the past 10 years. Of those surveyed, approximately 50% thought that there had been an improvement, while almost 20% had a negative opinion and 33% was undecided. In addition, 40% of respondents considered that physicians were much more friendly and 56% of those surveyed felt that doctors gave them more information now compared with 10 years ago (Bara et al., 2003).

Since 1999, the Centre for Health Policies and Services (Centrul pentru Politici si Servicii de Sanatate) has initiated a series of studies regarding the health status of the Romanian population and the way the health services respond to health needs of the population. Five studies are available so far: two among the general population (Centre for Health Policies and Services, 2006, 2007) and three among physicians (Centre for Health Policies and Services, 2000, 2003, 2005). These studies also investigated patients' opinions about quality of care. In the 2005 study of the general population (Centre for Health Policies and Services, 2006), a question asking the respondent to mention the problems they had during previous hospitalization resulted in only 8% citing "poor quality of care and medical services" and 3% citing "quality of food". The younger population (25–34 years) was the most discontented with the quality of care and medical services (17%): when asked what the most displeasing factor was during hospitalization, 10% indicated the quality of care and medical services. As much as 38% of the population would pay more in order to receive better quality of services. With regard to satisfaction with health services, the 2005 survey showed that the population perception on health services worsened compared with previous years: 31% (versus 23% in 2003) considered the health system to be unsatisfactory and in need of major reforms. The population was unsatisfied mainly with hospital services (37%) but to some extent also with family doctor services (19%), ambulatory services (9%) and emergency services (7%).

The 2006 study among population revealed that the quality of medical services provided in Romanian hospitals was perceived as "good" or "very good" by approximately 33% of the respondents. Also approximately 30% of the population considered that the medical services were of "average" quality and 25% assessed the services as of "poor" or "very poor" quality. Respondents from the south region of Romania were the most satisfied with medical services in hospitals (approximately 50%) and the most unsatisfied were from the north-east (40%). Of those interviewed, 40% considered that the hospital medical services were accessible or very accessible; a similar number considered that the accessibility was regular but 10% considered them inaccessible (Centre for Health Policies and Services, 2007).

4.2 Planning and health information management

Health technology assessment

There has been interest in using health technology assessment in Romania since the early 1990s, although at present activities at national level have not yet been established. There is increasing demand from health care professionals and managers for acquisition and provision of better and newer health technologies. In early 1992, a group of experts from the World Bank evaluated the state of health technologies in the country as part of a larger project (Moga et al., 2003). They interviewed approximately 200 Romanian stakeholders on different subjects, including health technologies. The report revealed several problems in this area, including ineffective acquisition, distribution and utilization of health technologies, and deficiencies in timely access to scientific information. The report recommended the establishment of health technology assessments.

Because of political, organizational and financial impediments, health technology assessments were not initiated at the central level. However, in 1998, collaboration began between the University of Medicine, Bucharest and Alberta Heritage Foundation for Medical Research (Edmonton, Canada). Several activities were carried out collaboratively, such as seminars with health professionals and decision-makers, a web site hosted by the CoPh (www.cmb.ro/hta/) and the introduction of a course on basic aspects of health technology assessment in continuous education for doctors. A survey for middle-level decision-makers revealed a high interest in health technology assessment (75%), with only 63% declaring any knowledge about it and its concepts and 10% having never heard of it (Moga et al., 2003). As a follow-up, in November 2002 the Ministry of Public Health, the NHIF and the national CoPh signed a memorandum to established health technology assessment activity. To date, no further steps have been taken. In 2005, the NHIF included in its structure a planning and prognosis centre, which will allow the use of evidence-based medicine and health technology assessments in the decision-making process.

Information systems

Since the profound political changes of the 1990s, the health care system and the health insurance system have moved through a series of successive reforms. The Government of Romania Ordinance 53/2000 on obligatory disease reporting and vaccination stipulates that physicians, both public and private, are obligated to report all communicable and some noncommunicable diseases

in conformity with the methodological norms of the Ministry of Public Health. While physicians in the public sector comply with this reporting system, private physicians do not. The data flows from the private sector are not yet clearly defined.

The principles stipulated in health information legislation can be summarized as follows: state institutions are responsible for the collection, storage and analysis of data on health determinants with the objective of creating a national database; they define and ensure the information flow and guarantee and protect the fundamental rights of individuals and the security of data; they make existent data and information accessible to decision-makers. Progress towards these objectives is currently underway.

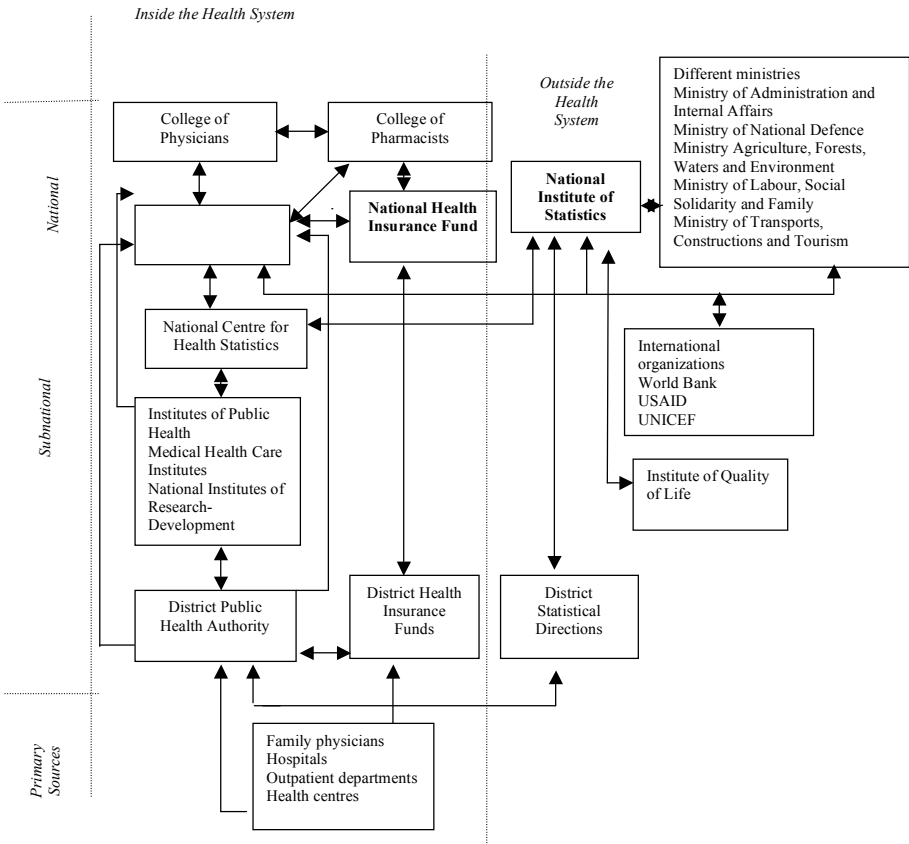
Various changes are still ongoing, which deeply influence the structure and functioning of the health information system. At present the system is struggling to keep up with decreasing staff and increasing requests for data and information. Information systems are not coordinated across hospitals, and patient medical records do not follow the patients.

As illustrated in Fig. 4.1, at present the health information system in Romania consists of three parallel subsystems: the first, led by Ministry of Public Health and the National Institute of Statistics, represents the formal statistical system; the second is led by NHIF; and the third contains a multitude of smaller information channels linked to national health programmes that are independent from one another (Section 6.1) but using the channels of the Ministry of Public Health. Each of these circuits is coordinated by a different institution or facility, depending on the purpose of the national health programme.

There is a high degree of data fragmentation; communication between and within the three subsystems is minimal or even nonexistent (Csiki et al., 2004). Each of the lead institutions exerts exclusivity over their data, which are accessible only for a fee (see below). Software, formats, definitions, standards and support used for reporting are different, both between and within subsystems. Repeated changes of software complicate data storage and processing. The reporting periodicity varies between subsystems. Electronic reporting and transmission is non-existent. As a result, public and private data producers – hospitals, family physicians and departments from the DPHA – have to comply with double or triple reporting, using formats and software that are incompatible.

In terms of content, data are limited to specific diseases (Section 6.1) yet causes and risk factors are scarcely and incompletely investigated, in particular for chronic diseases. Routine data on lifestyles and health determinants are not collected or are very intermittent. “Positive” topics such as well-being and health promotion activities are not documented. Data are already aggregated at

Fig. 4.1 Organizational chart of health information flow



Source: Csiki et al., 2004

district level and access to disaggregated or individual data is difficult from the national level; for instance, there is no possibility of obtaining individual-level data concerning providers' activity and costs per activity. The coordination levels (Ministry of Public Health and NHIF) did not request disaggregated data in the past. NHIF is in a process of gathering data on drug consumption. In this particular field, disaggregated data would also be seen at national level. Only a small fraction of the data is actually used for decision-making and for the evaluation of the health system performance. There is no information flow "downwards", for instance in the form of feedback to data producers.

There are also no organized quality control and quality assurance mechanisms. Data are often inappropriate, insufficiently processed and exploited, and sometimes even collected illegally (confidentiality breaches).

The lack of targeted analysis and interpretation of the data are among the weakest points of the health information system. Public health reports are still constructed around the production of traditional lengthy statistical tables on a limited number of topics considering the bulk of data that has been collected, with no multivariate analysis, insufficient construction of indicators and no dissemination plan. The range of information products is extremely limited, with poor presentation of the data.

Access to information held by the National Centre for Health Statistics is regulated by an Order of the Minister of Public Health from 2002 “on pricing the services for a fee charged by the National Centre for Health Statistics upon request from both individual and juridical bodies”. This order contains the list and prices of all services that can be delivered. The order does not specify whether the fees apply to all requesters from within and outside the health system, or whether they apply to all types of statistical information or only to the data that imply more sophisticated statistical processing.

At all levels, the Romanian health information system suffers from a shortage of qualified professionals. Recruiting and retaining skilled specialists is difficult because of the unattractive remuneration and the overburdening of professionals with repetitive tasks. This results in a loss of motivation and interest in the work. The lack of purpose for data collection, in conjunction with the lack of feedback, leads to poor data quality. The health information system relies heavily on data provided by primary care providers, who are especially at risk of losing interest: the large share of their time dedicated to filling forms distracts them from their main responsibility of patient care.

There are some strengths with the Romanian health information system.

- It reflects the advances in health system reform, with new information flows (Table 4.1) and reporting to the NHIF and the national health programmes in order to address emerging needs.
- There is a strong tradition of reporting over the last 50 years, with the necessary infrastructure already in place for generating, transmitting and processing data and time series.
- Some of the main demographic and health indicators are based on standardized formats, which allow comparability over time and across regions.
- The richness of the data and information could potentially be used to support decision-making, although decisions in health policy are often taken on the basis of criteria other than data.

However, the Romanian health information system remains characterized as a rigid centralized organization, rather unresponsive to modern public health

Table 4.1 Health data and information sources

Data type	Primary data source	Intermediary destination	Final destination
Routine data	Health care providers from entire health system (public and private)	District Public Health Authorities, District Statistical Directorates, District Health Insurance Funds	Ministry of Public Health, National Health Insurance Fund, National Institute of Statistics
Data and information for monitoring and evaluation of national health programmes and subprogrammes	Health care providers from health system involved in the national health programmes	District Public Health Directorates, District Health Insurance Funds	Ministry of Public Health, National Health Insurance Fund, Institutes of Public Health and Medical Health Care Institutes that are national programme coordinators
Surveys and special studies	Various national and international organizations	–	Ministry of Public Health, National Health Insurance Fund, National Institute of Statistics

Source: Csiki et al., 2004

information needs. While a considerable amount of data is collected, use of this data remains limited.

Research and development

In 2003, the Ministry of Education and Research published a report on general research in Romania that showed a significant decreasing trend in allocation of funds from all sources for research. In 1995, research and development in Romania received approximately US\$631 million. By 2001, this had decreased by 50%. Public funds represented approximately US\$80–90 million yearly in that period. Starting in 2002, and with the accelerated efforts for EU accession, public funds for research have been increased from US\$110 million in 2003 to US\$250 million in 2005. The Ministry of Education and Research (2006) set the goal to increase funding for research to 1% of GDP by 2010 only from public funds and to attract another 2% from private sector.

Medical research in Romania receives funding from several sources.

- The Ministry of Education and Research receives a certain percentage of GDP for research yearly (0.21% in 2003, 0.26% in 2005). A subcommittee

for medical research evaluates proposed projects. Medical research receives only approximately 3–4 % of the research budget.

- Ministry of Public Health, through the national health programmes, directly finances some institutes that have research departments or activities, including salaries for researchers. National health programmes also have some research components dedicated to specific areas.
- Romanian Academy Grants (state budget) distributes research grants to specific projects and three medical research institutes.
- Collaboration between research institutes and with foreign partners in jointly financed projects.
- Foreign sources are represented mainly by the EU but the United Nations agencies (UNFPA, UNICEF, WHO) have also financed scientifically sound studies in their area of interest.
- A few private sources, mainly through sponsorships of specialists, fund health-related research, but not specific research projects.

There is considerable potential for medical research in Romania. There is a network of researchers and auxiliary personnel in institutes and universities, more than 60% of whom are highly qualified scientists with academic and scientific degrees. However, there has been a process of passive restructuring of all research facilities and institutions owing to a shortage of funds.

There is a lack of use of research in the economy and in health care. This could be explained by the lack of a market for research and by massive import of products and technologies as a rebound effect of the restrictive policies in the 1980s. The gap between the need and the demand for research continues to be more and more significant (Section 4.2). Overall, Romania has no definite, widely accepted policy on medical research. Medical research, therefore, does not cover the needs of health policy and health development.

5 Physical and human resources

5.1 Physical resources

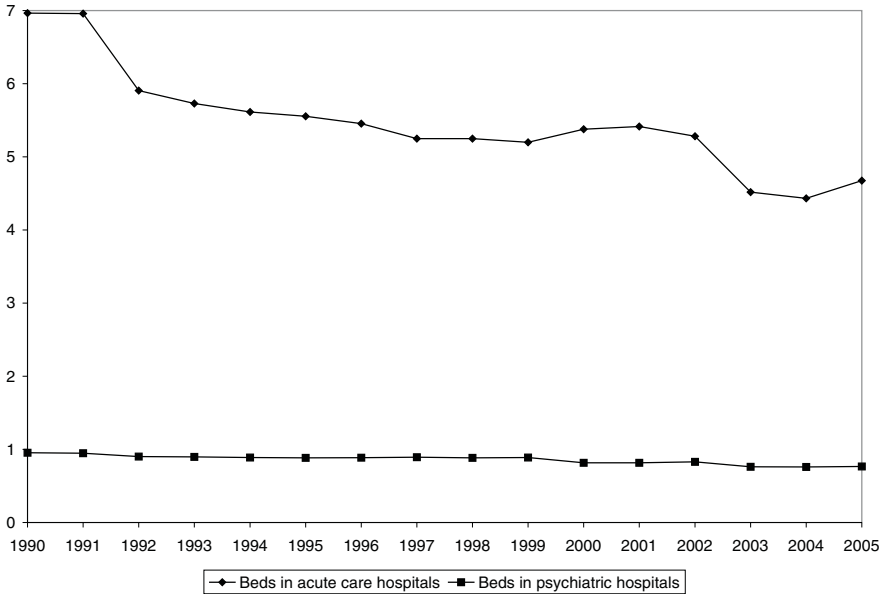
Buildings and capital infrastructure

The number of hospitals has remained relatively constant since the 1980s. In 1980, there were 416 hospitals registered by the Centre for Health Statistics of the Ministry of Public Health and 422 in 2003. Very few new hospitals were built after 1989: the increase in numbers results from splitting or transforming of outpatient wards into small hospitals and vice versa. For example, in 2002, the Centre for Health Statistics recorded 442 hospitals. This same year the Ministry of Public Health issued an act through which ownership of many hospitals was transferred from the Ministry of Public Health to local authorities and some hospitals for chronic diseases were transformed into long-term care facilities under the ownership of the Ministry of Labour, Solidarity and Family.

Including short-term acute care and long-term care beds, Romania had over 142 000 hospital beds in 2004, or 6.5 beds per 1000 people. There are regional variations in the ratio of beds per 1000 people, ranging from 8.5 in the west and in Bucharest to 4.1 in the south. The ratio is also lower for acute care (4.4; Fig. 5.1). Both the ratio for all bed types (6.5) and the ratio for acute care beds (4.4) were comparable to the average figures for the EU (5.9 for all bed types and 4.1 for acute care beds) (Fig. 5.2). The number of acute care beds in Romania decreased dramatically between 1990 and 2004, from a ratio of 6.9 to one of 4.4, with a slight increase in 2005, as shown in Fig. 5.2.

There was a sudden fall in hospital beds between 1991 and 1992 from a ratio of 8.9 to one of 7.9, reflecting a decrease of almost 28 000 beds. This was not

Fig. 5.1 Mix between beds in acute care hospitals and psychiatric hospitals, 1990–2005



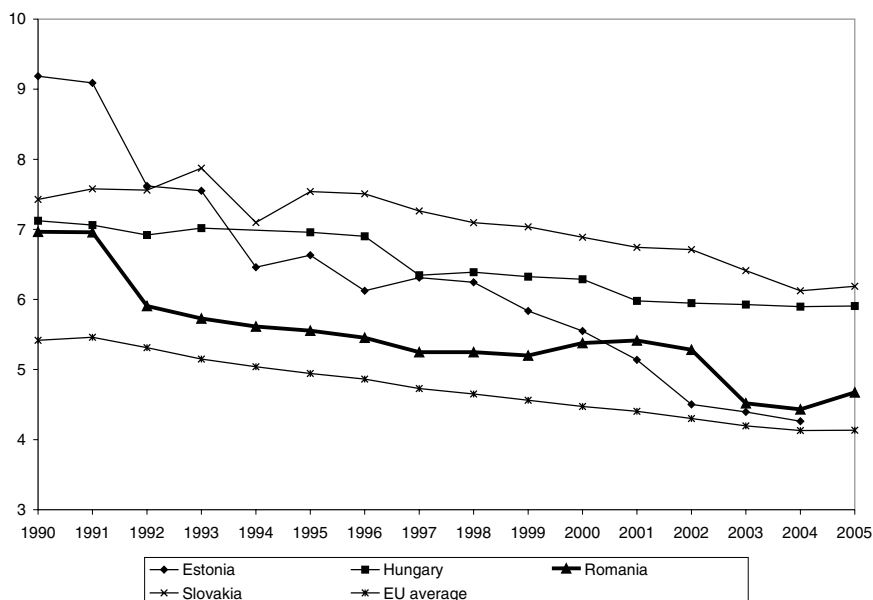
Source: WHO Regional Office for Europe, 2007a

a statistical distortion. At that time, the Ministry of Public Health performed a significant, planned reduction of hospital capacity. The beds targeted for reduction were the excess ones in departments with low bed occupancy. Low occupancy resulted from both blockage from the over-centralized decision-making process in the 1980s (resulting in a stable number of beds) and changes in health care demand in the early 1990s as a consequence of the social and economic transition. The most striking example of the latter was the fall in birth rate after the legalization of abortion and the provision of contraceptives, resulting in a decrease in admissions of children to hospitals (Section 6.1). Reduction of hospital beds continued slowly over the transition period, reaching 6.6/1000 population in 2003.

Capital investments

The Ministry of Public Health decides about investments in public hospitals (there are only a few private hospitals, about nine in 2003) or building of new hospitals. Funds are allotted from the state budget through the Ministry of Public Health, based on requests or needs assessment coming from the field. Expensive medical equipment is purchased through the same procedures. Private providers have no access as yet to such types of investments. Recently, the Ministry of

Fig. 5.2 Beds in acute hospitals in Romania and selected countries plus the EU average, 1990–2005



Source: WHO Regional Office for Europe, 2007a

Public Health has announced the initiation of a project that intends to invest in equipment (medical and information technology) for primary care. As capital investments have been also supported by external funded programmes and donations, there is no overall picture on the capital investments expenditures and their sources.

Information technology

According to the Ministry of Communications and Information Technology, Romania registered 713 000 personal computers in 2000. This represented only 6.4% of the total number of computers in central and eastern European countries (CEEC). The number of personal computers in Romania increased to 2.1 million at the end of 2003 and 2.5 million in 2004. The average annual increase was 20% in 2001, compared with 18% in CEEC during the same period. The estimated increase for the next five years is approximately 50%. In 2003, 19.03% of inhabitants were registered as internet users. Out of those, 7% had access to the internet via a home computer. (See www.mcti.ro/index.php for more information.) The number of domains increased from 16 639 in 2001 to 68 000 in 2004.

Within the health care system, data from family doctors are collected in full and transmitted to the health insurance fund electronically. An integrated information technology system is in development at national level. Its objectives are to integrate the existing data and format them for reporting and to allow links between health data and financial accounting data. At present, family doctors have to report to the health insurance fund in an electronic format for identification data of their subscribed patients, number of consultations and number of procedures for the purpose of financial reimbursement (capitation and fee for service). Meanwhile they are also reporting to the DPHAs with disease-related information.

Medical equipment, devices and aids

It is generally accepted that medical equipment in hospitals is old or overused. At the same time, the Ministry of Public Health has invested substantial amounts during the past years in purchasing new and modern equipment. Without a clear development plan and investment strategy, the distribution and variety of the equipment can be considered as uneven. Also, the development of the private sector led to important investments in new technologies and up-to-date medical equipment. Private clinics are now becoming important alternatives to what were once considered “top clinics” in the public sector, with long traditions in health care. In 2005, there were 10 magnetic resonance units and 55 computed tomography scanners in Romania (there are no data on the number of positron emission tomography scanners in Romania (Ministry of Public Health, 2006a).

5.2 Human resources

Romanian health care personnel can be grouped into four categories: doctors (including dentists), nurses, pharmacists and auxiliary staff (Table 5.1). Other staff categories in the health care sector (administrative staff, such as managers, economists, accountants, legal advisers, computing engineers and secretarial staff) account for under 1 in 20 of health sector employees. Until recently, nurses were considered as middle-level clinical staff, but their status as well as their training is undergoing a transition towards meeting the EU accession requirements.

The registration/licensing of doctors, dentists and pharmacists is the responsibility of their professional associations and the Ministry of Public Health. After Romania’s accession to the EU, the Ministry of Public Health will no longer have this responsibility. Nurses and midwives are in a different

Table 5.1 Health personnel per 100 000 inhabitants, Romania and EU25, 1995–2005

Year	Physicians (RO (EU25))	Family doctors (RO)	Dentists (RO (EU25))	Pharmacists (RO (EU25))	Nurses (RO (EU25))
1995	177 (313)		27 (57)	12 (68)	431 (732)
1996	181 (319)		26 (58)	11 (71)	441 (740)
1997	179 (323)		24 (59)	8 (71)	406 (740)
1998	184 (326)		24 (60)	7 (72)	409 (747)
1999	191 (331)		23 (60)	7 (73)	404 (752)
2000	189 (337)	51	22 (60)	7 (75)	402 (760)
2001	189 (340)	51	23 (61)	7 (77)	403 (767)
2002	191 (343)	52	22 (62)	6 (78)	418 (779)
2003	196 (319)	53	23 (60)	6 (76)	399 (690)
2004	198 (321)	53	23 (61)	6 (72)	401 (694)
2005	195 (318)	53	22 (61)	5 ()	372 (700)

Sources: WHO Regional Office for Europe, 2007a; National Institute of Statistics, 2005

Notes: Ro, Romania; EU25, the 25 EU Member States after enlargement in 2005 (i.e. prior to Romania and Bulgaria joining)

situation: the registration for nurses is by the Ministry of Public Health and by their professional association.

There is no formal human resource strategy in place. The planning is yearly based and restricted to establishing the number of specialist physicians to be trained and their location in the public system. This type of planning is based on the training capacity of university clinics as well as on the needs assessed by the DPHA. Retrospective analysis may conclude that the strategy should keep the total number of physicians at the same level over the years. This rule applies to all specializations. The transition period has proved that there is a constant need of public health specialists at various levels of the system.

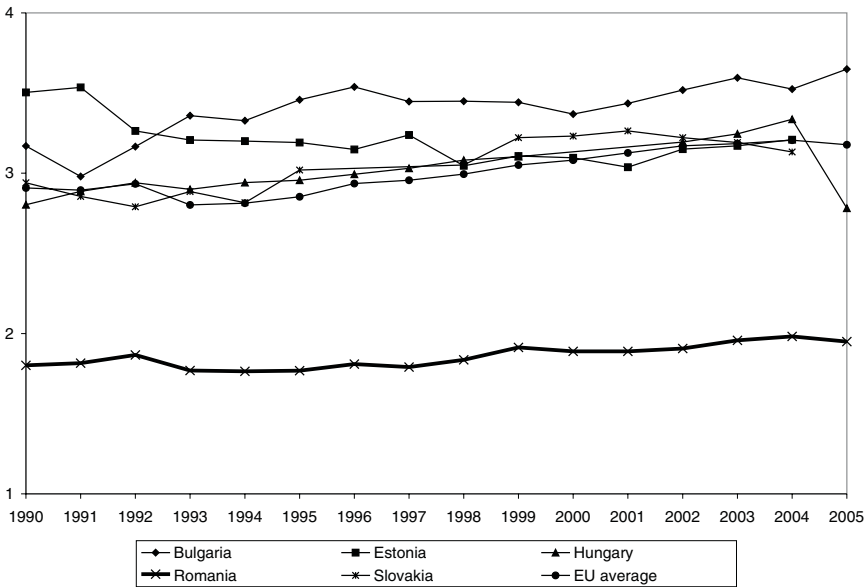
Health care personnel

Doctors and dentists

Undergraduate training of doctors takes place in 11 state-owned universities, five of which were created after 1989, and two private universities that are recognized by an independent national accreditation committee. A score of 7 (out of 10) or above in the State school Baccalaureate examination gives a student the right to enter the competitive entrance examination to a faculty of medicine. There are approximately two to three applications for each opening yearly, and the gender mix is 60% women and 40% men. There are no restrictions set on numbers (*numerus clausus*), each university deciding for itself the number of students to admit to study medicine, depending on the available funding. Funds

are determined by the Ministry of Education and Research. Public universities can give access to more students on a private, fee-paying basis, within a limit of 10% of the total student population. Otherwise tuition is fully covered by the state. The number of physicians has risen slightly since the early 1990s; however, this cannot be attributed to any specific policies. Even though there has been an increasing trend in the number of physicians in Romania since 1990, the total number is still very low (1.9/1000 population) compared with the EU average (3.4/1000), or even with similar countries such as Bulgaria (Figs. 5.3 and 5.4).

Fig. 5.3 Physicians in Romania and selected countries per thousand population, 1990–2005

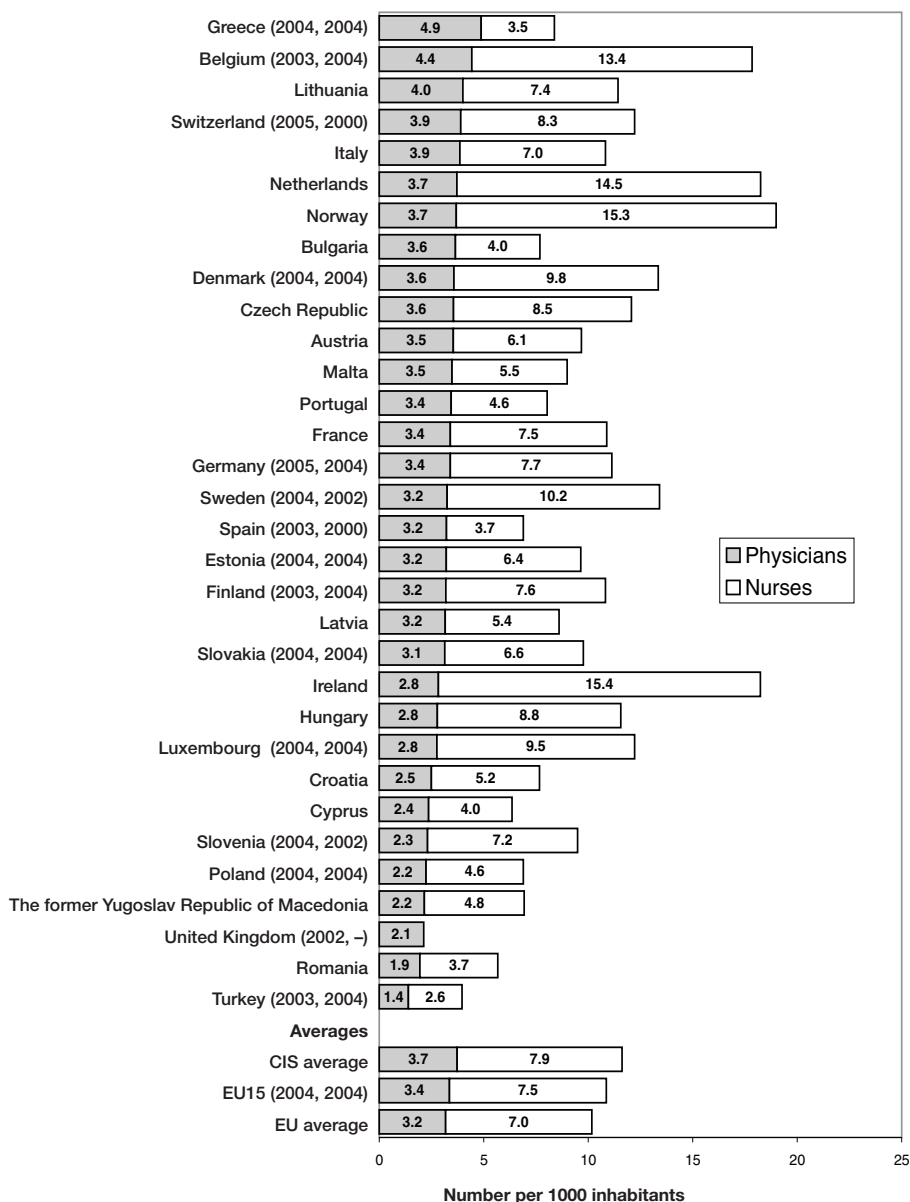


Source: WHO Regional Office for Europe, 2007a
 Note: EU, European Union

Training takes six years and meets the EU criteria for the curriculum and the 5500-hours rule. The European Credit Transfer System is implemented. The clinical period takes place in hospital departments or approved primary care settings. There is an overall 90% pass rate with very few failures in the later years. On average, 3700 students graduate each year.

After the final, national examination (for students from both public and private universities), physicians can enter a specialist training programme (residency) or work as nonspecialist ambulatory physicians (general practitioners). To enter the residency, physicians have to pass a demanding examination and, based on

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



Source: WHO Regional Office for Europe, 2007a

Notes: CIS: Commonwealth of Independent States; EU: European Union; EU15: EU Member States before May 2004

the result obtained, they can choose their speciality. There are approximately 1400 residency places for training yearly in 52 specialities.

The license for practice is issued by the CoPh and the Ministry of Public Health for those who passed the examination. Before 2005, doctors completed a probationary year of practical training following undergraduate medical study. However this probationary period was abolished in the 2004–2005 academic year.

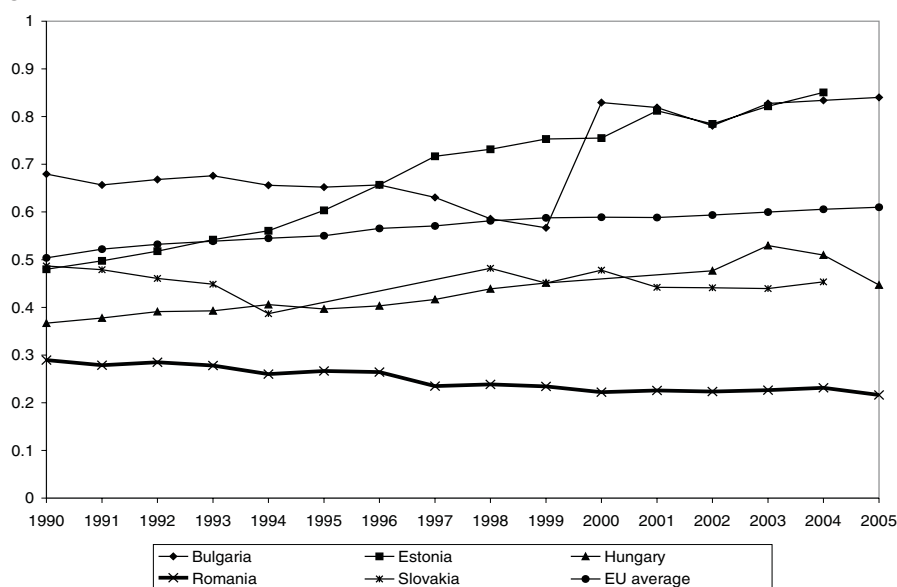
Specialities and the length of training for each of the speciality are consistent with EU regulation. After completion of the training period, doctors have to pass an examination that confirms their title of specialist and are registered with the CoPh and obtain a license to practise as a specialist. Membership of the college is compulsory for all doctors. The Ministry of Public Health is partly responsible for licensing until Romania becomes member of EU. Afterwards the CoPh will take over entire responsibility for this.

Until 1990, each faculty had separate sections for paediatric and adult medicine, and nonspecialist paediatricians were common in the health care system. Although after graduation physicians can start practicing as family doctors (general practitioners), during their studies no special emphasis has been placed on this type of training. However, in 1997, new chairs of family medicine were developed as a discipline in the the main universities of medicine (Bucharest, Cluj, Iasi, Tg. Mures, Timisoara, and Craiova).

There have also been changes in training for dentistry in order to comply with EU regulations. Since October 2003, new courses in dentistry implement the EU requirements, with increased education in dental care and more time devoted to clinical training. The academic and the professional titles of dental practitioners have changed from “medical stomatolog” to dental physician. As with medical graduates, the probation year was abolished in 2005 for dentists. The right to free practice is granted by the College of Dentists and dentists and pharmacists can follow specialized postgraduate training. The number of dentists has decreased over last 15 years (Fig. 5.5). This could partly be the results of emigration to westerns countries and privatization: dentistry was among the first areas that were privatized, and it is possible the registration of dentists has not been accurate.

Nurses

Before 1990, there were several different training schemes in nursing. Since then, nurses have been trained exclusively at nursing colleges. Current training takes three years of study after completion of high school. In the early 1990s, the Ministry of Public Health conducted an intense retraining programme to

Fig. 5.5 Number of dentists in Romania and selected countries, 2005

Source: WHO Regional Office for Europe, 2007a

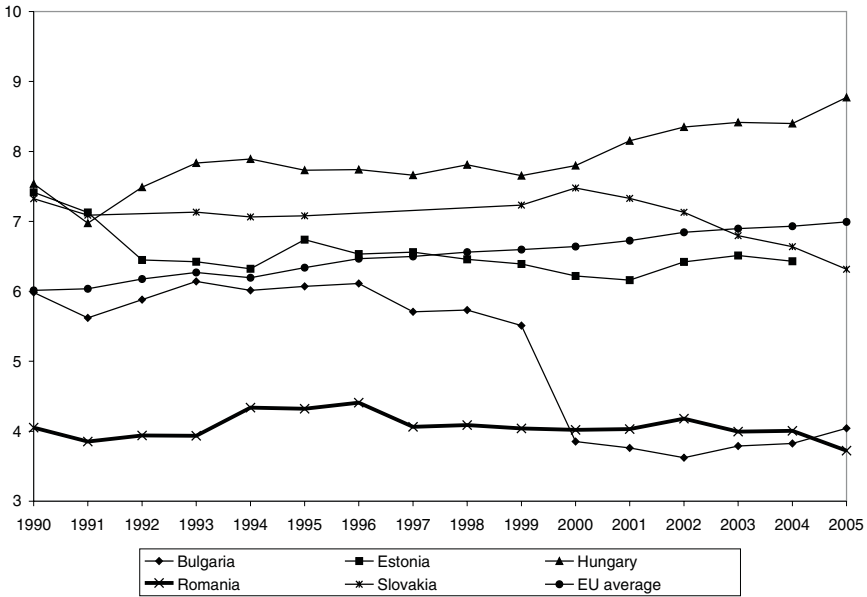
update the skills of nurses who had graduated from specialized nursing high school, which was the only form of training in the 1980s.

The curriculum of the nursing university colleges has only recently been agreed and implemented. Admission to nursing schools is based mainly on intellectual capacities of the students (a minimum average of five points, achieved by averaging High School grades and the Baccalaureate result), while other skills such as social behaviour and motivation have little importance. There are limited possibilities for nurses to upgrade their academic qualifications. Admission to private schools is less strict.

The number of students entering university colleges and public nursing colleges is strictly regulated by the Ministry of Education. The Ministry of Education also fully funds tuition for nurses. The number of students entering the private schools is not controlled. There are an estimated 35 000 graduates per year, compared with the 2000 graduates estimated as needed by the Ministry of Public Health, based on the absorption capacity of the public health care system (Fig. 5.6).

The necessity to implement EU requirements in nursing training has led to some important changes. Since 2003, all state training programmes have been based in university colleges, and the curriculum is compliant with the EU directive. Because of the large number of private schools and the limited

Fig. 5.6 Nurses in Romania and selected countries, 1990–2005



Source: WHO Regional Office for Europe, 2007a

Note: EU, European Union

means of controlling these by the Ministry of Education, it is expected that many of these schools will be forced to close. Moreover, schools now need to be approved by the National Accreditation Committee.

Midwifery schools were abolished in 1978. The role of midwife was taken over by the general nurse with a short period of on-site training in obstetrics and gynaecology. In 2003, the Ministry of Public Health reintroduced the midwifery profession and the first midwifery programme at university level was established with a curriculum and training period in compliance with EU requirements.

Eleven public universities and an unknown number of private universities and nursing schools compete in the field of medical education. From the legal point of view, Romania conforms with the EU directives regarding education and mutual recognition of diplomas for doctors, dentists, nurses, midwives and pharmacists.

Since the system is so heavily oriented towards the hospital sector, there was little opportunity for personnel, for instance nurses, to change their status. Nurses are still regarded as doctors’ assistants and not as independent health workers. Because their profession has not been an independent one during the

past 30 years, other health professionals, especially doctors, do not perceive them as belonging to an autonomous profession. However, changes in their professional training system may have future benefits. It is expected that by 2007 an increasing number of nurses and midwives with university training are expected to come into the labour market, while training for nurses at college level will disappear. This transition is likely to improve the status of nurses and midwives.

Pharmacists

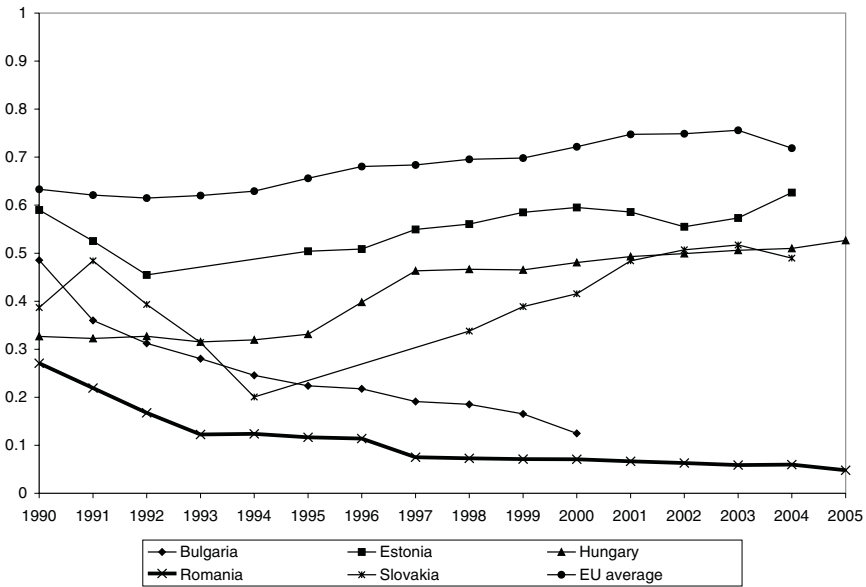
There are six university pharmacy schools and two departments of pharmacy within medical schools (medicopharmaceutical university education) accredited by the Ministry of Education with a standard curriculum of five years, including six months interservice training. There is a *numerus clausus* based on the number of practising pharmacists/pharmacy per capita and territory. The application of this quota restriction is controlled by the Ministry of Education, the National College of Pharmacists, and the Ministry of Public Health. Graduates have to pass a license examination for a master in pharmacy diploma. Training meets EU requirements.

As with medical graduates and dentists, the probation year was abolished in 2005 for pharmacists. The right to free practice is granted by the College of Pharmacists and pharmacists can follow specialized postgraduate training.

The number of registered pharmacists and pharmacies was not regulated until 1999, when Ministerial Order 201/1999 introduced restrictions: the number of pharmacists cannot exceed 1 to 5000 inhabitants; and pharmacies have to be located no less than 250 metres apart. There were extensive debates about limiting the number of pharmacies within a chain and prohibiting pharmacy chains. The College of Pharmacists strongly promoted the idea of “one pharmacist one pharmacy” as well as a limited number of pharmacies per area or population. Finally, in 2004, the Ministry of Public Health revised the limits as follows: 1 pharmacist/5000 inhabitants in Bucharest, no more than 1/3500 in district capital cities and no more than 14000 in the remainder of the cities. There are no constraints regarding the location and no limits in rural areas.

Data from the *Health for All* database (WHO Regional Office for Europe, 2007a) suggest that the number of pharmacists is relatively low and has decreased in recent years (Fig. 5.7). However, these are likely to be inaccurate because there are approximately 5200 pharmacies in the countries and each is mandated to have at least one pharmacist. Moreover, each of the 450 hospitals has a pharmacy. Therefore, the numbers are likely to be much higher than shown in the figure.

Fig. 5.7 Number of pharmacists in Romania and selected countries, 1990–2005



Source: WHO Regional Office for Europe, 2007a

Migration of health care workforce

Data referring to internal and external migration of the health care workers are extremely poor as there is not a standard and constant procedure for data collection. Nevertheless, there are a series of data sources which provide relevant although incomplete data (see www.cpss.ro for more information): Ministry of Public Health, National Institute of Statistic, Ministry of Labour, Social Solidarity and Family, CoPh and the Nursing and Midwifery Association.

After 1 January 2007, physicians’ diplomas were recognized within the EU and from 15 January 2007 the Ministry of Public Health would issue, on demand and after the relevant examinations had been passed, a certificate attesting to the diplomas of physicians, nurses and midwives. By the end of August 2007, the Ministry of Public Health reported that they had received 3500 applications for attesting the physician diploma (including dentist and pharmacists), of which 2800 were approved and other 700 were being analysed. Also, there were approximately 2600 applications for obtaining the conformity certificate for nurses and midwifery, and 1550 had already been settled. Nevertheless, not all the persons who obtained such a certificate emigrated but the numbers may serve as rough estimations of health care personnel who intend to leave the Romanian health system.

The data on internal migration of the health care personnel are not available. Nevertheless, it is well known that health care personnel migrate (especially physicians) towards the main university centres (Bucharest, Cluj-Napoca, Iasi, Timisoara, etc.) and the economically developed areas (in the west of Romania and in Bucharest).

A study in 2007 by the CoPh had the following results of a survey: 54% of the physicians answered that they would like to work abroad; 89% of these would like to work in a EU country. The main reasons for working abroad were low wages in the Romanians health system (55%) and poor working conditions (40%) The physicians complained about the level of financing (48%) and the organization (40%) of the health system The main two reasons for complaining about daily activities were lack of resources (especially modern medical equipment) and limited career opportunities.

A different study in 2007 by the Health Solidarity Union had the following findings:

- 64.89% would like to work abroad for a higher wage
- 85.6% declared that they have colleagues who work abroad
- 45.3% were not satisfied with current health reform implementation
- 52% complained about the financing and funds managing in health system
- 40% complained about poor working conditions
- 50% complained about lack of motivation (the main reason is low wage).

France, Germany and the United Kingdom are the most popular countries with Romanian physicians for emigration, as they have active policies in recruiting external personnel, including from Romania. In these countries, the most popular specializations are general medicine, intensive therapy and psychiatry.

The migration of young physicians is an important concern. Lately, there have been many indications of this concern in the media. The CoPh in Romania has asked the Ministry of Public Health to elaborate a strategy of human resources in health care system that takes into consideration the high rates of emigration to come, especially among young physicians.

Planning

There is no clear workforce strategy in place. The actual planning is based on a relative constant number of workplaces within the public system. If a *numerus clausus* is in place, it refers mainly to the teaching capacity and not to the health care needs of the population. The number of places in residency for doctors

is determined by the Ministry of Public Health based on the historical level of doctors for each speciality. Each year, the district health directorates report their estimated needs for each speciality in five-year periods (five year is the average duration of residency training) based on new entrants and exits from each speciality. Decisions to increase the number of trainees in a speciality are taken on an ad-hoc basis. (Chapter 7 has information on the policies affecting numbers of health care personnel.)

Policies oriented towards numbers and skills of health professions have been governed mainly by harmonization with EU regulation for mutual recognition and were not intended to change the mix. Policies have mainly targeted training, upgrading of educational and training facilities and the retraining some health professionals (e.g. nurses in the early 1990s, see above). Meanwhile, the number of physicians during the transition period remained constant.

The oversupply of nurses should be regarded as a consequence of the limited absorption capacity of the public system and the lack of planning policies (Figs. 5.4 and 5.6). There is a shortage in midwives because of the absence of training since the 1980s.

6 Provision of services

6.1 Public health

According to law, public health services in Romania are guaranteed by the state and financed by the state budget, local budgets, the health insurance fund and direct contributions. Preventive services comprise (1) national health programmes financed mainly by the state through the Ministry of Public Health, and (2) services and drugs provided by family doctors (i.e. immunizations) financed by the NHIF. In 2006, there were four clusters of national programmes: the Community Public Health Programme; the National Programme on Prevention and Control of Non-Communicable Diseases; Maternal and Child Health; and the National Programme on Management and Health Policies.

The Ministry of Public Health is the central authority in public health. It is responsible for setting organizational and operational standards for public health institutions, developing and financing national public health programmes, data collection, empowering public health officials and producing regular reports on the population's health status. The Ministry of Public Health is responsible for providing preventive services at both the individual and population level. At the local levels preventive activities are organized and supervised by the DPHAs.

Title 1 (on Public Health) of the Health Reform Law (95/2006) regulates the framework in which some services are organized and provided. The majority of services regulated by the law can be classified as monitoring population health in relation to environmental risk factors, sanitary inspection and preventive medicine. The 2006 Health Reform Law embraces the concept of “new public health”, incorporating the empowerment of communities, a multidisciplinary

and intersectoral approach, decentralization, evidence-based decision-making, risk management and the precautionary principle.

The concept of New Public Health was introduced into Romanian health policy documents for the first time in 2004, when the Ministry of Public Health, with support of the World Bank, adopted a National Public Health Strategy that referred to Frenk's *The new public health* (Frenk, 1993). The main objectives of the National Public Health Strategy are to:

- stop negative health trends and create conditions for improving population health status;
- adopt the European Union's public health principles and policies;
- continue the health system reform process in order to improve its performance, as an essential premise for health status improvement.

At the local level, public health is the responsibility of the 42 DPHAs (including the Bucharest Public Health Authority) as decentralized units of the Ministry of Public Health (Section 2.2). These institutions are responsible for public health issues such as:

- developing and implementing public health programmes;
- monitoring the health status of the population in relation to the main environmental risk factors;
- communicating to the public and to local authorities on environmental health matters, sanitary inspection and preventive medicine.

Supervisory staff in the DPHAs monitor occupational and environmental risk factors and enforce public health regulatory standards. Their expenses, including operating costs, salaries, materials, and medicines, are financed by the Ministry of Public Health. They are also allowed to raise private money, charging fees for some of their activities, such as issuing licenses and permits concerning hygiene and sanitary conditions, the adequate provision of utilities, waste management and implementation of equipment and personnel norms for medical or other public service units. Health professionals in public health authorities usually hold qualifications in public health, hygiene, epidemiology or nursing.

The technical and professional bodies for public health within the Ministry of Public Health are the four institutes of public health in the main university centres: Bucharest, Cluj, Iasi, and Timisoara. These four institutes are autonomous bodies accountable to the Ministry of Public Health and they provide technical support on public health and related topics to ministries and other national institutions with health responsibilities. They also run continuing education courses and training in public health, management and related specialities. They are mainly funded by the Ministry of Public Health, but they

also have the right to attract additional funds by providing public health services at the request of non-profit-making or for-profit corporations or by developing partnerships with different private or public organizations. There are also two centres of public health in Targu Mures and Sibiu.

The Institute of Public Health Bucharest (founded in 1927) has been recently reorganized into three main sections – public health and management, environmental health and occupational health – and two centres: the National Centre for Control and Surveillance of Communicable Disease and National Centre for Information, Education and Communication in Health. The main tasks of the Institute are to:

- elaborate national standards and regulations for public health;
- develop methods for the evaluation of quality of living standards and the working environment;
- provide professional consultations;
- elaborate and provide technical coordination, implementation and evaluation for four subprogrammes of the National Programme on Community Health: (1) surveillance and control of communicable diseases, (2) surveillance and control of HIV/AIDS, (3) surveillance and control of tuberculosis, and (4) evaluation of health status and risk factors.

The Institute of Public Health Bucharest is the national focal point for several international programmes and actions, for example Global Environmental Radiation Monitoring Network (GERMON), a WHO/HQ programme; United Nations Environment Programme (UNEP); International Atomic Energy Agency (IAEA) for nuclear accidents, Global Environmental Epidemiology Network (GEENET), a WHO programme for the European information network for environmental epidemiology; a Food and Agriculture Organization (FAO)/WHO programme for foodborne diseases; and a Global Environment Monitoring System (GEMS)/AIR programme for air pollution and environmental health.

The Institute for Health Services and Management (founded in 1991) was reorganized by the Governmental Decision 1329/2002 as the National Institute for Research and Development in Health, a self-financing institution coordinated by, but no longer subordinated to, the Ministry of Public Health (Section 4.2). This institute performs research, technical assistance, continuing education and postgraduate training in health management, health policy, health promotion and health education. It also carries out activities under the national health programmes of the Ministry of Public Health on a contractual basis. The Health Reform Law (95/2006) reorganized the institute into the National School of Public Health and Health Management, which includes the Centre for Postgraduate Training on Public Health and Health Management,

the Health Management Centre, the Health Services Research and Evaluation Centre, the National Health Promotion Centre and the Department of Public Health and Management for Nurses. The school also incorporates the National Mental Health Centre.

There are a number of intersectoral (interministerial) commissions outside the health sector that coordinate initiatives that have an impact on public health: the National Anti-Poverty Commission; the Road Safety Ministerial Committee, which coordinates a national plan for improving traffic and road safety; the Ministry of Education which has responsibility for school-based interventions; and the Ministry of Social Protection and Labour which has responsibility for social work. Both these ministries rely on the Ministry of Public Health or its agencies for technical input.

Environmental health

Environmental health is a shared responsibility of the Ministry of Public Health and the Ministry of Environment and Water Resources Management. In June 1999, the two ministries signed a Declaration of the Third Ministerial Conference for Environment and Health held in London, United Kingdom, and are currently working together in its implementation. They also worked together on the harmonization of Romanian legislation with the *acquis communautaire* for Chapter 22, Environment, of the National Programme for Accession to the European Union.

The Institute of Public Health Bucharest is the national level coordinator for the National Environmental Health Action Plan (1999–2007). The major objectives of the current action plan are:

- institutional development and capacity building in environmental health;
- protection of the population against potentially harmful living conditions;
- harmonization of Romanian environmental health legislation with EU legislation;
- public communication on environmental health matters and involvement of the community in the decision-making process at the local level.

At the local level, environmental health is monitored by the DPHAs through the Environmental Health Compartments and the District Environmental Protection Inspectorates.

The Institute of Public Health Bucharest also participated in a project with the European Centre for Environment and Health, Bilthoven Division, and the Romanian Ministry of Public Health, designing an environmental health information system to be used by the National Environmental Health Action Plan. This project designed methodological guidelines for information system

implementation and future development. Data were supplied to the WHO and the European Centre for Environment and Health, Bonn Office, and a set of fact sheets were developed and included in a European report (WHO Regional Office for Europe, 2007b). Then in 2003, Ministerial Order 1041, on the establishment of the environmental health information system, was issued, setting up the legal framework for the functionality and responsibilities of the information system (Ministry of Public Health, 2004b).

Since 1993, Romania has taken part in an integrated programme for a healthy environment under the WHO Regional Office for Europe and the PHARE programme on air quality and the environment.

Significant initiatives concerning health hazards have been taken in the process of obtaining EU membership. For example, Romanian legislation has been revised in order to reach the standards of the *acquis communautaire* in areas such as consumer and health protection, environment, transport policy, agriculture, social policy and employment. The majority of these legislative documents are issued in common by two or more ministries.

Communicable diseases

The main participants involved in the communicable diseases surveillance system are the Ministry of Public Health (through its Department of Public Health), the National Institute for Research and Development in Microbiology and Immunology “Cantacuzino” (through its national reference laboratories), the four regional public health institutes (Bucharest, Iasi, Timisoara, Cluj), the 42 DPHAs, including the Bucharest Public Health Authority, and the primary care network and infectious diseases hospitals.

Communicable disease surveillance is financed from the state budget under the National Programme on Community Health. Treatment for communicable disease is covered by the health insurance funds.

The reporting system covers over 110 communicable diseases, classified as diseases with immediate nominal notification by phone; diseases with nominal notification within 24 hours after detection; and diseases with numerical reporting (weekly, monthly, quarterly and annual). Detection and notification of communicable diseases are among the responsibilities of primary care, ambulatory units and hospitals, particularly the infectious disease hospitals as specialized units. For the majority of communicable diseases (those outlined in the Minister of Public Health Order 638/1978), hospitalization is compulsory. The confirmation of cases is done in the majority of districts by the laboratories of DPHAs, including the Bucharest Public Health Authority, and/or by the national reference laboratories. The transmission of data is by phone or by fax, and the notification forms for each communicable disease case are sent

by mail or courier service. Data analysis is carried out in very few districts at the DPHA level; for the most part, data analysis is conducted at regional and national levels and the feedback to the district is sporadic. The surveillance of certain communicable diseases (tuberculosis, sexually transmitted infections including HIV/AIDS) occurs in parallel systems using a separate informational flow (Ministry of Public Health, 2004b).

Unsatisfied with the system's capacity of detection and rapid control of the communicable diseases, an assessment of the surveillance system was conducted by the Ministry of Public Health and the WHO Regional Office for Europe (2001). The recommendations made by WHO constituted the basis of a PHARE project (RO-01.07.14: Improving the Romanian System for Epidemiological Surveillance and Control of Communicable Diseases; February 2003 to October 2004). The recommendations were also taken into account in developing the national action plan for the improvement of the communicable disease surveillance system, approved by the Ministry of Public Health under Order 123/2003. Based on those recommendations, a new Centre for Disease Control was established. This centre has been operational since 1 January 2005 within the Institute for Public Health Bucharest, with the main objective of integrating parallel surveillance systems and coordinating the whole national communicable diseases network, but also having the role of monitoring the national immunization programme, coordinating the national system of early warning and rapid response, and the management of the information system (Section 4.2).

Compulsory immunization is organized by the DPHAs and mainly carried out by family doctors, as outlined in the national programme. In the large cities, vaccination and serosurveillance offices have been created; they are associated with either the institutes of public health or teaching hospitals for infectious diseases. Immunizations are provided by family doctors according to a national vaccination and revaccination calendar for tuberculosis, hepatitis B, diphtheria, tetanus, pertussis, poliomyelitis, rubella, measles and mumps (Table 6.1). Immunization rates in Romania have remained at acceptable levels (e.g. 97% for measles in 2004, which is above the rates for most western European countries; see Fig. 1.3).

Specific surveillance systems

For specific diseases there are separate networks, organized by highly specialized institutes:

- the HIV/AIDS surveillance network (the Institute for Infectious Diseases, Professor Dr Matei Bals);

Table 6.1 The immunization scheme recommended for children and teenagers within the national immunization programme

Age	Vaccine	Comments
0–7 days	BCG, Hep B	In maternity
2 months	DTP, VPOT, Hep B	Simultaneously
4 months	DTP, VPOT	Simultaneously
6 months	DTP, VPOT, Hep B	Simultaneously
9–11 months	Ruj	
12 months	DTP, VPOT	Simultaneously
30–35 months	DTP	
7 years (in 1st form)	DT, Ruj	School campaigns
9 years (in 3rd form)	VPOT, Hep B	School campaigns
14 years (in 8th form)	DT, BCG	School campaigns
24 years	DT	And every 10 years afterwards
Postgraduate students 1st year	Hep B	School campaigns

Source: Ministry of Public Health, 2006b

Notes: DTP, diphtheria–tetanus–pertussis; VPOT, polio oral trivalent; Hep B, anti-hepatitis B vaccine; Ruj, vaccine against measles; BCG, Bacille Calmette–Guérin vaccine against tuberculosis; DT, diphtheria–tetanus (used in those over 14 years of age)

- the tuberculosis surveillance network (the Institute of Pneumology, Professor. Dr Marius Nasta);
- the safety blood transfusion network (the National Institute of Haematology Transfusion, Professor Dr C.T. Nicolau);
- the sexually transmitted disease surveillance network (the Dermatovenerology Centre, Scarlat Longhin).

For each of these, disease case definitions have been developed and separate forms and data flows have been established.

Infectious disease hospitals report HIV/AIDS information to the eight regional HIV centres (Bucharest, Brasov, Cluj, Timisoara, Craiova, Constanta, Iasi and Targu-Mures). These centres then report to the national level at the Institute for Infectious Diseases, where data are processed in the HIV/AIDS Monitoring and Evaluation Department. At the district level, forms are also sent to the DPHAs, which also gather information on HIV testing activities (blood centres, laboratories).

Under Law 584/2002 regarding the measures for preventing the spread of AIDS in Romania and for protecting HIV-infected persons and those with AIDS, an interministerial National Commission for Surveillance Control and Prevention of HIV/AIDS was established under the Prime Minister's office. At the Ministry of Public Health level, there is also a National Commission for

Fighting AIDS, composed of experts with the role of maintaining a national database to support decision-making on AIDS treatment at national level.

For tuberculosis, suspected cases are diagnosed and confirmed by the tuberculosis district hospital. Both family physicians and tuberculosis specialists from the nearest tuberculosis centre are responsible for case notification and for completing the case management form. The completed form is forwarded to the district tuberculosis dispensary, and from there to the district health statistics office and to the national level at Institute of Pneumology.

For sexually transmitted diseases, nominal notification of cases of syphilis and gonorrhoea to the DPHA statistics office is required. Aggregated monthly data are sent at the national level to the Dermatovenerology Centre.

Health promotion

Within the National Programme on Community Health, there is a subprogramme of health promotion and health education that aims to encourage healthy attitudes and behaviours. Among the activities carried out under this subprogramme are information, education and communication campaigns on local and national public health problems in accordance with the WHO Health Calendar; harmonization of health legislation on health promotion and health education; training activities for health promotion and health education professionals; and surveys on the level of health education in the population. The Ministry of Public Health is responsible for the execution of this subprogramme and the DPHAs and the institutes of public health are responsible for implementation.

The health promotion network is represented at the national level by the Department of Public Health, in the Ministry of Public Health, while at local level it is represented by the departments of health promotion within the DPHAs. In addition to implementing the national subprogramme of health promotion and health education, health promotion departments of the DPHAs develop programmes according to local needs, involving the local community and local authorities.

Within the Institute of Public Health Bucharest, the National Centre for Information, Education and Communication in Health is responsible for technical coordination, monitoring and evaluation of the national health promotion and health education network and participation in the elaboration and implementation of the health promotion and health education programmes. Also, within the School of Public Health and Health Management, there is a National Centre for Health Promotion, which provides technical assistance for government organizations and NGOs, trains staff involved in health promotion and health education activities and conducts research on factors influencing healthy attitudes and behaviour.

Romania now has several NGOs very active in the field of health promotion that can attain closer contact with target communities; however, they are unevenly distributed across the country, being concentrated mainly in the big cities.

Romania also participates in international programmes such as the European Network of Health Promoting Schools (coordinated by WHO, the Council of Europe and the EU; nationally by the National Centre for Health Promotion) and several UNICEF programmes (Training of Trainers for HIV/AIDS prevention; Information, Education, Communication Programme in Reproductive Health; Programme for Women and Children's Health).

Occupational health

Occupational health services are regulated mainly by the Minister of Public Health Order 615/2001. This requires employers to arrange, at their own expense, professional-level occupational health services for their employees in order to minimize work-related health risks. Services provided are mainly preventive: surveillance of the working environment to assess risks; evaluation and monitoring of employees' health status and working ability by pre-employment and periodical medical examinations; statutory health surveillance by screening of workers exposed to specific hazards; provision of employers and employees with information, counselling and guidance about the health risks present in the workplace and about how they can be prevented; referring employees for further treatment or rehabilitation as needed; and provision of rehabilitation counselling. Occupational health professionals also advise on planning and organization of work and working practices, including the design of workplaces and on the evaluation, choice and maintenance of equipment and on substances used at work. They also provide first aid and emergency treatment.

Occupational health providers include occupational health offices within public or private medical centres, occupational health compartments within public health institutes, clinical wards of occupational health and occupational diseases, specific centres of monitoring units with high professional risk, and departments of occupational health within the DPHAs. They can be contracted by employers and should be authorized by the Ministry of Public Health.

At DPHA level, the departments of occupational health coordinate and collect data on occupational health in the district. They carry out periodic surveys in order to evaluate the occupational risks and to take measures for supporting protection and promotion of workers' health.

The Institutes of Public Health from Bucharest, Cluj-Napoca, Iasi, Timisoara, the Centres of Public Health from Targu Mures and Sibiu, and the National

Institute for Research and Development in Occupational Safety Bucharest provide technical assistance on occupational health and carry out research and assessment surveys on occupational risks.

Screening

Within the National Public Health Programme of Prevention and Control of Non-Communicable Diseases, there are organized screening programmes for both the entire population and high-risk groups. The subprogramme of cancer prevention and control provides regional opportunistic screening programmes for cervical, breast, prostate and colorectal cancer. Unfortunately, the lack of resources does not allow the screening of the entire population, and the programmes are limited to certain districts selected on the basis of their technical capacity to run the programme. Only one region of the country, the Northwest Region, centred on the University town of Cluj and the Institute of Oncology from Cluj, does have an organized screening programme for cervical cancer that respects the EU agreed clinical quality guidelines (20% of the region's target group is tested). Dissemination of this best practice is one of the components of the National Cancer Plan agreed to be developed in 2008 between the Ministry of Public Health and the Federation of Patients' Association. The opportunistic nature of screening makes it difficult to assess how many districts are conducting screening at any one time. Screening programmes for high-risk populations are organized within the subprogramme for prevention and control of diabetes (including first-degree relatives of patients with type 2 diabetes and pregnant women), the subprogramme for prevention of endocrinological diseases (screening of women in menopause for osteoporosis) and the subprogramme for prevention of geriatric diseases (screening of people aged over 60 for early detection of atherosclerosis and cognitive disorders).

Within the National Public Health Programme for Maternal and Child Health, there is a screening programme for phenylketonuria and congenital hypothyroidism in order to prevent encephalopathy. The same programme includes risk assessment and screening for early diagnosis of birth defects. Screening for hearing or vision deficits are also performed on a pilot basis for newborns. As these tests are not yet available nationwide, efforts are being taken for their dissemination.

In Romania there is also widespread radiological screening for tuberculosis.

Limited screening programmes are also conducted by NGOs, such as screening for asthma and chronic obstructive pulmonary diseases (the Romanian Society of Pneumology), screening for early detection of neoplasm caused by

smoking (the Romanian Cancer League) and screening for early detection of children with autism in Timisoara (the Community Centre for Children with Autism).

Unfortunately, scientific criteria for appraising the viability, effectiveness and appropriateness of screening programmes are not used. The screening programmes conducted under the national public health programmes are not monitored in terms of clinical quality but only in terms of number of screened persons, cost containment and compliance with screening responsibilities.

Maternal and child health

As a result of the national policy to increase the birth rate that was active until 1990, no family planning network was developed in Romania. However, since 1992, 11 reference centres for reproductive health have been established. Nine of these centres are based in university clinics and two are located at district level. They provide information and technical assistance, family planning, abortion and cancer-screening services. They also train staff from other centres: since July 1995, it has been possible to grant accreditation (*competenta*) in family planning. The project was assisted by WHO, UNFPA and the Department of Continuing Education of the Ministry of Public Health, and it was funded by the World Bank. A parallel network for family planning has also been created through various NGOs. Permanent contraceptive methods are not yet promoted, as there is no law permitting voluntary sterilization. Previous legislation, which only allowed sterilization for medical reasons for mothers with five or more children, or for women over 45 years of age, remains unchanged to date. In addition to specialized centres and clinics, family doctors provide counselling on family planning and contraceptive methods.

The Institute for Maternal and Child Care is a technical highly specialized institution that advises the Ministry of Public Health on standards for maternal and child health and takes part in health programmes. As well as compiling epidemiological data and setting standards, it is involved in the National Programme of Family Planning, in training obstetricians and in supervising midwifery training. Antenatal and postnatal services provided by family doctors include registration in the first trimester of pregnancy; monthly check-ups; testing for HIV and syphilis; antitetanus immunization of pregnant women; follow-up of postpartum mothers up to four weeks after maternity discharge; and general check-ups for children immediately after maternity discharge and at ages 1, 2, 4, 6, 9, 12, 15, and 18 months. However, a study by the Institute for Maternal and Child Care in 2001 revealed that approximately 16% of pregnant women who delivered in 2001 were not recorded and surveyed during their pregnancy (Ministry of Public Health, 2004a).

Pregnant women and postpartum mothers have special rights within the social health insurance system: they are insured without paying the insurance premium and if they do not have an income or their income is under the level of minimum national average, they are entitled to free-of-charge ambulatory treatments and transport to the hospital for delivery or emergencies (they are exempt from co-payments).

Romania still has an unacceptably high level of maternal mortality compared with the EU and the CEEC (Section 1.4). The maternal mortality ratio in Romania in the year 2000 was approximately 33/100 000 live births, of which 16/100 000 live births were abortion related, while nearly 17/100 000 live births were from obstetric complications. The same figures in 2006 were approximately 15/100 000 live births, out of which only five were abortion related (Ministry of Public Health, 2007a). The abortion rate has decreased in the last ten years, from 2.2 abortions to every live birth in 1993 to one abortion to every 1.6 live births (UNDP, 2004). Most of the abortions in Romania are registered for women in the 20–34 year age group. The high rate of abortion reflects women using this method as a substitute for contraception. Unintended or unwanted pregnancies lead not only to terminations by induced abortions but also to unwanted children. This is one of the reasons why the number of abandoned and institutionalized children in Romania remains high.

Although knowledge of modern contraceptives is high in Romania, contraceptive use remains low, with only 23% of women and men using modern contraceptive methods and only 10% of persons aged 15 to 49 using condoms. Consecutive *Reproductive Health Surveys* by UNDP have shown that condom use at first sexual intercourse has increased during the last five years, but at the same time the average age of starting sexual activity decreased. While the level of knowledge is high, risky behaviours also remain high.

Only approximately 60% of pregnant women visited their physicians in the first trimester. The average number of prenatal visits is five. This results in a great number of deliveries at home, very likely without medical assistance and appropriate prenatal care. It is estimated that as much as half of maternal deaths occur through obstetrical risk, and that nearly half of the pregnant women who die during delivery are not recipients of prenatal care.

Health inequalities

The main initiative regarding the inequalities in health is the Government Decision no. 829/2002, which approved the National Anti-Poverty and Social Inclusion Plan elaborated by the Anti-Poverty and Social Inclusion Commission (2001). The Commission's role is to support the structures that coordinate the implementation of the National Anti-Poverty Plan and also to monitor the

general impact of anti-poverty strategies. At district level, anti-poverty and social inclusion commissions have been set up to develop local anti-poverty plans.

One of the main objectives of the National Anti-Poverty and Social Inclusion Plan is to improve access to public social services such as health and education. Among the strategic objectives set in relation to health, the Plan includes universal coverage with basic health services and increasing access to health care for deprived population groups, especially for populations living in rural areas, the unemployed and the poor Roma population. The attainment of other objectives of the Plan, such as elimination of extreme poverty, increasing access to education for children of low socioeconomic groups and decreasing unemployment rate, will also have a positive impact on health, acknowledging the link between health and socioeconomic status. The National Anti-Poverty and Social Inclusion Plan also includes measures for housing, public utilities, equal employment opportunity, prevention of ecological risks and reduction of criminality and corruption.

The Ministry of Public Health has taken some initiatives for reducing poverty-related inequalities in health, such as offering incentives for family doctors to locate themselves in isolated rural areas (setting up bonuses, modernization of practices), training Roma representatives as health mediators to facilitate contact between health personnel and Roma communities, hiring Roma health mediators at DPHAs, training community nurses as a link between primary health care practices and community social services, and offering free medical services for deprived population groups (Section 3.3).

The Millennium Development Goals Report mentions targets to be achieved by 2010. The universal goals were adapted to the Romanian situation because of the relatively higher level of the country's development needs. The report indicates as priorities for resource allocation the assurance of a minimum income; development of systems to deal with child abandonment, trafficking of human beings, juvenile delinquency, child abuse and neglect; halving the mortality rate among children under five years by 2015; and halving the maternal mortality rate by 2010 (Section 1.4). Law 202/2002 on equal opportunities for women and men aims to exclude all possible gender-generated inequalities.

The approach to inequalities in health in recent years has focused on access to health services, while outside the health sector the main priority has been the development of a social work system. The latest development in social work has been quite significant. In the early 1990s, social services mainly took the form of local initiatives in the NGO sector, with local authorities subsequently developing some services. In 2001, a social work law was developed to provide a legal framework for these services. As a result, national agencies

were established for disabled persons, child protection and adoption, and violence prevention and family protection. All these agencies have a health component that aims to facilitate access to health services of marginalized or at-risk people.

A remaining challenge is the further development of the national social work system and its links with the health system. Usually marginalized people are not registered with a family doctor (7% of the population was not registered in 2005) and consequently they cannot benefit from any public health services. Discussion and debates are taking place around the issue of establishing structures to provide directly social services within the health system or within the social work system, around the financing of those structures, and around the link between the two systems.

Broadly speaking, the obvious challenge for the health system remains the attainment of the objectives announced in the National Public Health Strategy, which would also contribute to the reduction of health inequalities and inequalities in access to health care.

6.2 Patient pathways

The family doctor is the main point of entry into the system for patients. The gate-keeping role of the family doctor was strengthened in 1999 by introducing direct payments for hospital admission without a referral from a family doctor.

If a patient wants to see a specialist without referral, he or she will be charged. Specialist doctors in both inpatient or outpatient settings are obliged to send a “medical letter” to the family doctor who referred the patient. Specialist doctors can be consulted directly for follow-up visits and for some specialties (acupuncture, homeopathy, family planning, herbal medicine).

Ambulatory laboratory analysis can be accessed only with a family doctor’s prescription. Analysis on request is charged by direct payments.

Emergencies are referred directly to hospitals by the emergency care system (Section 6.4). Preventive care and other public health services are delivered directly or through family doctors (Section 6.1).

6.3 Ambulatory care

Until 1999, primary health care was delivered mainly through a countrywide network of approximately 6000 dispensaries staffed with doctors and nurses. The dispensaries belonged to the Ministry of Public Health and were administered through the local hospital, which also held territorial funds for both primary and secondary health care. Community-based dispensaries provided health care for children under the age of five, housewives, pensioners and the unemployed living within a specific area. There were also enterprise-based dispensaries for employees (sometimes for a number of adjacent enterprises) and school dispensaries providing medical care for anyone in full-time education. Patients were not allowed to choose their dispensary but were assigned one according to their place of employment or residence.

Following reforms in 1998, patients in Romania are now allowed to choose their primary/ambulatory care doctor, with the possibility of changing to another doctor after a minimum period of six months' registration with the previous doctor. General practitioners were renamed "family doctors" and ceased to be state employees, functioning instead as independent practitioners, contracted by the (public) health insurance fund but privately operating their medical offices. Therefore, all family doctors are independent and publicly funded (Section 3.6 covers details of payment of doctors). The Ministry of Public Health is currently considering transferring ownership of the premises of the former dispensaries to family doctors or specialist doctors. Currently, only 19 dispensaries remain (Table 6.2); these are staffed by nurses and are located in some villages.

The ministries that maintained their own health care networks also owned dispensaries, which were based in military institutions, railway stations and harbours and provided health care services to the employees of those institutions. Since 1990, these have also become private medical offices staffed by family doctors or specialists.

In addition to preventive and curative care, family doctors also provide antenatal and postnatal care and some health promotion and health education

Table 6.2 Number of ambulatory care facilities in Romania, 1997-2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Dispensaries	3970	3972	164	70	37	21	19	24	24	21
Family doctor offices	0	0	0	9398	9342	9192	9278	9049	8932	8904
Polyclinics	507	478	303	90	62	45	40	32	29	27
Hospital outpatient departments	0	19	133	345	378	340	313	316	301	290

Source: Ministry of Public Health, 2007b

activities. They also provide health certificates for marriages, for incapacity to work and for deaths.

In 2003, there were 9278 family doctors' offices (mostly in single practices) in Romania (Table 6.2). The number includes the former dispensaries and the private medical offices. The boom in privately provided ambulatory care is well reflected in Table 6.2.

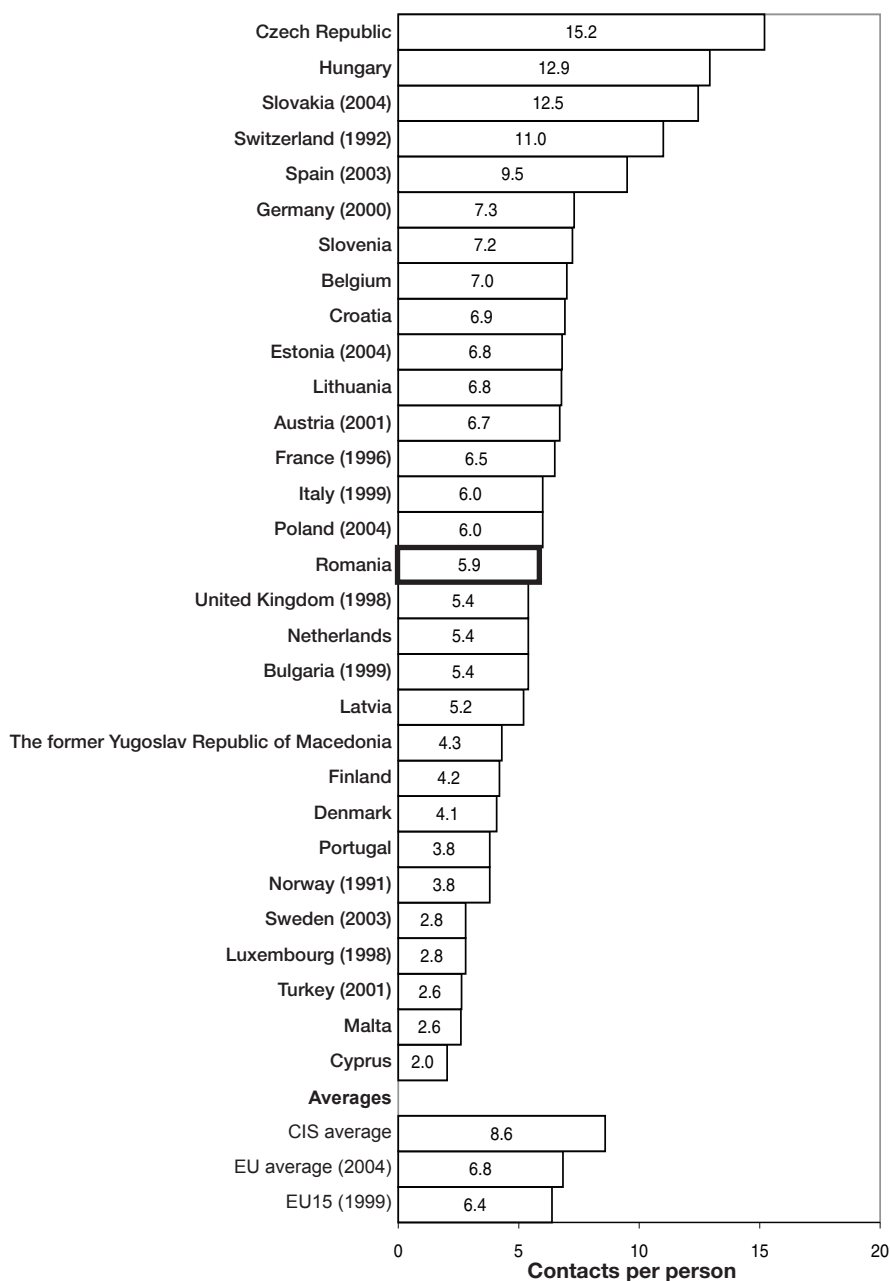
Specialized ambulatory health care is delivered by a network of hospital outpatient departments, centres for diagnosis and treatment, and office-based specialists. Previously, specialist ambulatory care providers were polyclinics located only in urban areas (while the dispensaries in both rural and urban areas catered only for primary health care). The majority of polyclinics delivered services free at the point of delivery, but a small number charged out-of-pocket payments. After 1998, most polyclinics became hospital outpatient departments, free-standing centres for diagnosis and treatment or were split up into medical offices for individual specialists. These changes are reflected in Table 6.2. The reform has also meant that patients now have a free choice in selecting a specialist. The specialized physicians who work in ambulatory care generally divide their time between the public and private sectors. Many of them are employees of a hospital and work extra hours in private settings, with or without a contract with the health insurance fund. Private sector work is only permitted out of hours.

The number of outpatient contacts per person in Romania for 2004 was 5.8 (Fig. 6.1). The figure falls below the European average, which reflects the failure of health reforms that intended to decrease the burden on hospitals by encouraging alternative forms of care, including outpatient services. One explanation could be the failure in changing patient behaviour and the tendency to go directly to a hospital emergency unit instead of visiting a family doctor.

6.4 Inpatient care

According to Title VII of the Hospitals of the Health Reform Law (95/2006), hospitals are organized on the basis of geographical criteria into:

- regional hospitals: assuring services for the most severe cases that cannot be solved at district or local level, in defined catchment areas;
- district hospitals: located in the district's biggest town, having a complex structure providing almost all medical and surgical specialties and an emergency care unit ensuring services for the problems that cannot be solved at local level within the district;

Fig. 6.1 Outpatient contacts in 2005

Source: WHO Regional Office for Europe, 2007a

Notes: CIS: Commonwealth of Independent States; EU: European Union; EU15: EU Member States before May 2004

- local hospitals: general hospitals providing services for the area in which they are located (town, village).

Tertiary care is provided in specialized units (specialized hospitals, institutes and clinical centres) such as the Institute for Maternal and Child Care, the Institute of Oncology, the Neurosurgery Hospital, the Institute of Balneophysiotherapy and Rehabilitation, the Institute of Pneumophysiology and a number of cardiovascular and other surgery departments in teaching hospitals.

Inpatient care is also provided by:

- long-term care hospitals: for patients with chronic diseases who require long-term hospitalization (Section 6. 8);
- medicosocial care units: institutions under local authorities that provide both medical and social care;
- sanatoriums: units that, in addition to usual treatments, provide natural therapies;
- health centres: inpatient units that assure medical services for at least two specialties.

In terms of ownership, all hospitals are publicly owned, except for a few small hospitals, and are under state administration. In 2002, this ownership was transferred to the local councils apart from some tertiary units that are still owned by the Ministry of Public Health. The new law allows public hospitals to establish private wards. To date, only two or three such wards have opened, meaning that there are still very few private hospital beds in Romania.

Hospitals are led by a manager who holds executive power. The managerial position is obtained in a competitive process organized by the Ministry of Public Health (or the other ministries for hospitals in the parallel systems). Until 2006, the managerial position was usually held by a physician. However, the recruitment criteria in 2006 included graduation from management courses as a main requirement for candidates, which resulted in other specialists taking on hospital management roles. Managers sign a three-year management contract with the Ministry of Public Health or the other ministries that have their own health systems. The management contract includes performance indicators that serve to monitor the director's managerial activity. The manager appoints an executive committee of hospital directors: the medical director, the research and development director, the financing director, the nursing manager, and other managers in accordance with the structure of each hospital. All such managerial positions in the hospital are recruited by competition organized by the hospital's manager.

Hospitals are authorized by the Ministry of Public Health and accredited by the National Hospital Accreditation Commission.

Compared with other European countries, especially with other EU Member States, Romania has a high inpatient care admission rate: 24.92/100 population in 2003, compared with the EU average of 17.94 (WHO Regional Office for Europe, 2007a). The figure reflects not only underutilization of primary and ambulatory care services but also the lack of cooperation between inpatient care and social care providers, many patients being hospitalized for mainly social rather than medical reasons. The “postponed” hospital reform intends to reconfigure the balance between social care, long-term care and inpatient care (Section 7).

An independent report on quality in hospital care has highlighted the poor condition of many hospitals: many had inappropriate or poorly maintained buildings and needed urgent repairs (InterHealth, 1998). The situation was similar for polyclinics, and the vast majority of both hospital and polyclinic medical equipment (X-ray facilities, laboratory facilities) was judged obsolete. Since then, significant improvements have been in evidence and the Ministry of Public Health has invested in new medical equipment (Section 5.1). However, hospitals still need improvements in both equipment and building maintenance, the current situation being far from satisfactory.

Many Romanian hospitals have incurred financial debt in recent years, despite a substantial increase in health insurance collections and an expansion of the health service budget. Not all hospitals have incurred debt, however; the main offenders appearing to be medium to large hospitals, including the university hospitals. According to a recent report (GVG Consultancy, 2004), the accumulation of debts in the hospital system and the poor manner in which debt is being managed are having negative impacts on service levels and quality and are seriously distorting effective financial resource allocation and financial management performance.

There are many reasons for the accumulation of debt in the public hospital system. In the simplest of terms, debt has arisen because hospitals (the hospital director and the hospital board) have provided health care services beyond those that are possible from the actual financial allocation they have received. However, the reality is far more complex and it is too simplistic to conclude that the problem lies only with hospital directors.

In short, inpatient care remains one of the “unsolved” issues within the health care reform process; it is one of the most controversial and debated items, and one that is influenced by a strong lobby, since the majority of decision-makers in health come from the hospital sector, which holds the major share of financial resources for health (Section 7.2).

6.5 Emergency care

Emergency care is provided through a network of emergency centres with a territorial dispatch system connected to hospital wards specialized in receiving emergencies. Each district has an emergency dispatch system with a number of ambulances located in hospitals or dispatch centres and emergency wards at designated hospitals. All hospitals have to be prepared to receive emergencies, but not all of them are properly equipped for this purpose. Those that are not must rely on delivering first aid and sending the patient to the appropriate hospital.

Since 1994, the Ministry of Public Health has started to invest in the emergency system, starting with pilot phases and then moving to countrywide implementation. Technical and financial support was received during the whole period from the Swiss Agency for Development and Cooperation. The success of the pilot phases impelled the Ministry of Public Health to extend the project nationally, financially supported by a World Bank loan. The project, which continues to be in implementation, is designed to modernize all equipment in the emergency system by providing type B and C ambulances, extrication vehicles, medical tents, equipment for mass-casualty disaster intervention, and medical motorboats. It also supported investment in integrated, community-based emergency medical services, coordinated with other emergency services (principally fire departments), in order to reduce response times and improve health outcomes in accident and emergency incidents. The project was designed to establish integrated dispatch systems with a single emergency phone number, integrated emergency response teams in the districts capital cities, specialized extrication and rescue squads in fire departments of the capital cities, first-response teams in smaller towns, and one advanced mobile medical post in each district for major incidents.

Because of this project and the technical support from the Swiss Agency for Development and Cooperation, the emergency care system has been upgraded to improve the quality of care in life-threatening emergencies, thereby reducing death rates and complications in cardiac emergencies and trauma. Local networks of emergency services have been established. The project has improved training capacity through curriculum development, course accreditation and equipping of additional training centres. Distance-learning modules were developed. In 2004, over 900 physicians and nurses working in ambulance services and hospital emergency departments were trained. Training activities became routine. There is evidence that the equipment is being used effectively and is having an impact on improved patient care and outcomes, but there have been difficulties with quality of data for the monitoring and evaluation indicators (World Bank, 2004).

The reform is now focusing on the area of communications, with the aim of an initiative to pilot an integrated computer-aided dispatch system in a number of districts. This is one of the main unfinished areas in the continuum of improvement of emergency care. This initiative was driven partly in response to the government's decision to implement a universal "112" system in Romania, which was not compatible with existing ambulance dispatch approaches. This discord was caused in part by rivalries at certain stages of the development of emergency medical services development between the relevant department of the Ministry of Public Health, the ambulance services, the hospital-based emergency medical service staff, and the Fire Department in the Ministry of the Interior. Finally, agreements have been reached with regard to management and responsibility for emergency activities, especially extrication vehicles.

Emergency care is provided also by a network of private ambulances, where the patient has to pay directly. Private ambulances are mainly provided in big cities.

Primary care providers, especially family doctors, conduct home visits only as a last resort, and currently there is no incentive to create a network of primary care providers that could offer services for emergencies in the evening or at night. In such circumstances, patients in big cities tend to call 112 directly. The emergency services in big cities are, therefore, overloaded, records indicating that "real" emergencies accounting for less than 25% of all calls.

6.6 Pharmaceutical care

Pharmacies and pharmacists were among the first health care facilities and health professionals that were privatized or allowed to operate their own private business. Pharmaceutical manufacturing, distribution systems and quality are controlled by legislation. There is no formal pharmaceutical policy in Romania, although many of the essential building blocks for developing such a policy are currently being set in place, such as tools for regulating the pharmaceutical market and its links with the health care system.

Production is inspected by the national drug agency while distribution/warehouses and pharmacies are inspected by the Ministry of Public Health and DPHAs (Section 5.3). Producers cannot have their own wholesale distribution or pharmacies. There are only two facilities where the state (Ministry of Public Health) still holds a share. One is Antibiotice Iasi, a producer of generic drugs (mainly antibiotics) and the other is Unifarm, a distributor. These facilities do not benefit from any protectionist measures and compete with all other private companies.

Hospitals are supplied with drugs by wholesalers, and purchasing is regulated by the public acquisition law. Commercial relations between wholesalers and retailers (pharmacies) are not regulated except for ensuring that the wholesaler mark-up does not exceed 9% (Minister of Public Health Order 612/2002).

The Ministry of Public Health is responsible for the registration and licensing of pharmacies. The total number of pharmacies in 2005 licensed and registered was 4861. Out of these, approximately 3400 had contractual relations with a health insurance fund. Only contracted pharmacies are permitted to sell drugs that are included in the compensation scheme (Section 3.5). The main criteria used to select these pharmacies are professional qualification of the personnel and accessibility to patients. In urban areas, there were 3759 pharmacies registered while in rural areas the figure was only 1102.

Drug registration is the responsibility of the National Drug Agency, where data exclusivity operates according to the EU requirement. Bolar provision operates too, while compulsory licensing was never used, regulations being TRIPS compliant. Currently, there are approximately 5300 drugs registered in Romania, with some 100 new applications for registration every month.¹

The continuing rise in cost of pharmaceuticals during the transition period has caused increased concern to the Ministry of Public Health and the government in general. However, measures for cost containment and drug regulation have been introduced on an ad hoc basis. According to the drug law, the Ministry of Public Health establishes the maximum retail prices of both locally produced or imported pharmaceuticals, with the exception of over-the-counter drugs. Prices for these drugs are not regulated by Ministry of Public Health; they are freely sold on the market. However producers or importers of over-the-counter drugs need to notify the Ministry of Public Health about prices of their products on a quarterly basis.

The National Drug Agency gives approval for alternative/complementary medicines to be marketed but the Ministry of Public Health does not regulate their prices.

After a new drug is registered at the National Drug Agency, the Ministry of Public Health gives it a price before the product is allowed to be marketed in Romania. For drugs that are already registered, producers also need to apply to Ministry of Public Health for a price if a price increase is requested. When requesting a price increase, producers are usually simply changing the packaging size or size of tablets. Permission for price increase is seldom granted.

1. Despite the new applications, the total number has decreased in recent years, from 5500 in 2000. More drugs will lose their registration in the coming period owing to implementation of Good Manufacturing Practice and EU requirements

Producers and importers have to present their manufacturer price to the Ministry of Public Health. Importers are asked for the price from country of origin and the price for which they have bought the product (cost, insurance and freight price), while local producers are asked for the level of production costs, profit and wholesaler price. Based on information provided by the importer or producer, prices are usually compared with prices of the same product already on the market in the following countries: the Czech Republic, Bulgaria and Hungary, and if necessary with Poland, Slovakia, Austria, Belgium and Italy. The lowest price is considered. No other comparison tools are used. Both importer and local producers are allowed to take a gross profit margin of 7.5%. Only the importer can add a further mark-up of 8.5% for services connected to the import. The total mark-up for imported drugs was 30% until 2003; since then it has decreased gradually.

Price adjustments can take place on a yearly basis by applying a formula that takes into account the currency exchange rates between the adjustment dates. Prices are published in a Drug Catalogue that is updated quarterly (see www.msf-dgf.ro for more information).

The mark-up of the wholesaler and the pharmacist is dependent on the price of the package (usually one-month's supply of medication). Some importers give discounts to wholesalers; wholesalers give discounts to pharmacists. The total mark-up of the wholesaler and pharmacist varies from 12% for prices over €2.14 and 24% for prices below €0.5.

In 2002, the total pharmaceutical market was approximately US\$ 577 million out of which US\$ 389 million represented the ambulatory care pharmaceutical market. The latter figure includes both reimbursed (by NHIF) and privately purchased drugs. According to an unpublished study by the supplier of sales and marketing data for pharmaceutical companies, CEGEDIM, it seems there was an increase of 10–14% in the total pharmaceutical market in 2005 compared with the previous year.

The national association of domestic producers (APMR) also indicates such an increase in the pharmaceutical market. In 2002, APMR reported 88 domestic producers out of which 20 were responsible for 90% of the domestic supply. Because of the introduction of Good Manufacturing Practice in 2004, the number of domestic producers has decreased. According to APMR, the share of local production has been decreasing, starting in the early 1990s, with locally produced drugs covering 40% of the market in terms of value but over 80% in terms of volume in 2004. This was in part a result of a long price-freezing policy on the value of locally produced drugs. Even now, although the same formula is used to calculate prices of imported and locally produced drugs, there is still a difference between the two categories. Prices of Romanian products are

much lower than those of imported products because, for the same ex-factory price, an imported drug receives a 40% addition to the maximum allowed retail price while a locally produced one receives, in comparison, only 31.5%. The percentages added to the final price including the maximal mark-up described above plus 7.5% for distribution mark-up valid for both imported and locally produced drugs. The imported drug receives an additional 8.5% for import services. The Ministry of Public Health intends to eliminate these differences between imported drugs and locally produced pharmaceuticals and by the end of 2007 the proposal should be in force.

The cost-sharing arrangements are described in Section 3.3 and below. Measures used to monitor and analyse pharmaceutical consumption are limited by capacity and qualified personnel within the Ministry of Public Health and the health insurance fund. The health insurance fund collects data on drug consumption by regions, pharmacies and doctors in terms of both values and volumes, but no comparisons or analyses are conducted by defined daily doses.

Moreover, there is no clear link between consumption and price setting or reimbursement. The proposed introduction of generic substitution created and continues to sustain long debates between doctors and their professional association and the Ministry of Public Health. The introduction of generic substitution has, therefore, been postponed several times. However, if a doctor indicates the INN on a prescription, the pharmacist must dispense the cheapest drug. They must inform the patient of its potential substitute. Prescription was influenced by setting indicative budgets for prescribing doctors but later the system was abandoned in favour of pharmacy budget ceilings (Section 3.4). The health insurance fund sets yearly budget ceilings for pharmacies. The total pharmacy budget for 2005 was set for approximately US\$ 400 million. In 2003, expenditure for drugs in ambulatory care represented 13.8% of the health insurance fund budget.

According to Law 95/2006, patients have access to drugs covered totally or partially by health insurance fund. Every year, the Ministry of Public Health and the NHIF compile a positive list of drugs based on the Drug Catalogue. This list determines which prescription drugs are covered by health insurance funds, irrespective of a patient's contributory or non-contributory status. The list is based on the recommendations of a so-called "Transparency Commission", where members include representatives of the CoPh, the College of Pharmacists, the Ministry of Public Health and the NHIF. The membership of the commission is established by a ministerial order. Law 95/2006 gives no details regarding the criteria for creating this drug list but the Ministry of Public Health has issued a ministerial order that regulates the activity of the Transparency Commission. The Ministry of Public Health delegates the establishment of the selection

criteria for the positive list to the Transparency Commission but at the same time indicates five basic criteria:

- drug efficacy towards a specific clinical objective, proved by some controlled clinical trials;
- superior efficacy in comparison with other drugs already on the list, notified through the effects on relevant clinical objectives proved by some controlled clinical trials;
- superior safety in comparison with drugs already on the list (lower level of adverse reactions) in accordance with the updated safety file;
- improvement of patient compliance and intake;
- a decrease in treatment cost with products from same therapeutic category with the same therapy indication as other drugs for a specific disease.

On the positive list, drugs are listed as generic compounds in alphabetical order. The list applies to outpatients. Within the compensation scheme, a reference price system is applied. The reference prices are based on the lowest-priced product within a cluster of medicines. In addition, patients themselves have to pay 10% or 50% of the reference price (i.e. of the lowest-priced product of the cluster); if patients want a more expensive product, they will also have to pay the difference between the price of the lowest-priced product and the drug actually dispensed. These clusters are formed on the basis of the generic substance, the pharmaceutical form and the strength. List A contains mainly generic drugs while list B includes expensive generic drugs and “branded names” (new, innovative drugs). For the drugs covered 100% by the health insurance fund, the reference price was not operational until May 2005, when the reference price system was extended to the whole of list C, including the over-the-counter drugs that are reimbursed as part of the compensation scheme.

The drug compensation scheme sets some prescription limitations for doctors. For chronic diseases, patients receive not more than one prescription per month, with a maximum of four medicines belonging to lists A or C. If the prescribed drug belongs to list B, then a maximum of three medicines is allowed per prescription and the total value should not exceed 300 lei (approximately €85). Exceptions are subject to special approvals. Health insurance funds are obliged to inform prescribers and patients in cases where more than one prescription per month has been issued. In cases where the budget limit for medicines from list B is exceeded, patients are required to pay the difference out of pocket. Currently, there is a reference price system that clusters medicines at the ATC 5 level (active ingredient and dosage form). A series of medicines belonging to 11 disease control programmes determined by Ministry of Public Health (e.g. tuberculosis, HIV, oncology, cardiovascular diseases and

haemophilia) are reimbursed at 100%. In addition, all medicines for children and pregnant women are 100% reimbursed.

Other initiatives such as training in good prescribing practice remain at the level of pilot projects and are rarely institutionalized. The establishment of therapeutic guidelines is regarded as a necessity by all professional bodies and was started by the CoPH in 1999, but did not achieve system-wide recognition. In 2003, the process was relaunched with the production of a methodology for therapeutic guidelines supported by WHO and the Centre for Health Policies and Services. The Family Doctors Association has already produced four guidelines and more are expected to appear. The Ministry of Public Health, NHIF and the CoPh are in the process of institutionalizing the therapeutic guideline setting process.

Future challenges to the pharmaceutical market are represented by the gradual price increase of drugs caused by the approaching EU market and EU accession. An additional factor is the lack of combined measures to improve cost-effectiveness; currently, pharmacoeconomics is used neither in decision-making nor in drug-consumption analysis.

6.7 Rehabilitation/intermediate care

Rehabilitation is organized within hospitals and some ambulatory care facilities as well as in a few specialized rehabilitation hospitals. Referral from a doctor is necessary and co-payment is the rule, since the health insurance fund covers only part of the provided services: approximately 25% of the daily hospitalization cost for a period no longer than 21–30 days. There are rehabilitation services within some specialized hospitals or former sanatoria, where the Ministry of Labour and Social Protection² subsidizes the treatment through the pension fund.

6.8 Long-term care

Law No. 17 of 6 March 2000 regulates the social care for elderly persons. According to this law institutional care is organized as follows.

Community services for older people include:

2. The Ministry of Labour and Social Protection was called the Ministry of Labour and Social Solidarity between 2001 and 2004. Starting in 2005, it was renamed Ministry of Labour, Social Solidarity and Family.

- temporary or permanent home attendance;
- temporary or permanent attendance in a home for older people;
- attendance in day centres, clubs for older people, homes for temporary attendance, social apartments and houses, and other similar locations.

Community services provided for older people in their home include:

- *social services*, particularly for prevention of social marginalization and supporting social reintegration, legal and administrative counselling, payment of some services and current obligations, home and household attendance, help for the household, and food making;
- *medicosocial services*, particularly for help with personal hygiene, adaptation of the home to the elderly person's needs, encouraging economic, social and cultural activities plus temporary attendance in daily centres, night shelters or other specialized centres;
- *medical services*, such as medical consultations with attendance at home or in public health institutions, consultations and dentistry attendance, medicine administration, supporting sanitary materials and medical devices.

Medical services are provided on the basis of legal regulations regarding social health insurance. In 2006, there were a total of 60 units of so-called medicosocial facilities, with a total of 2365 beds. (Ministry of Public Health, 2007b).

In 2005, there were 19 care homes for elderly people in Romania (Table 6.3). Service organization is the responsibility of local councils, which provide services directly or through contracts with NGOs and religious organizations. In order to ensure home care services for dependent elderly persons, local councils can hire attendance personnel by the hour, on a part time or full time basis, depending on the necessary period of attendance.

The spouse or relative who takes care of a dependent elderly person can benefit from compensation from the local budget. If the individual is salaried and working part-time, they can claim support for the remainder of their salary. Alternatively, they may receive the equivalent of a gross monthly salary of a beginner social assistant with medium training.

The quality of long-term care is regulated by Order no. 246 of 27 March 2006, issued by the Ministry of Labour, Social Solidarity and Family. The quality standards of long-term care refer to organization and administration, human resources, access to services, service provision, rights and ethics.

Table 6.3 Care homes for elderly persons by county, 2005

County	Number of care homes	Monthly average number of beneficiaries	Capacity: places	Number of demands in waiting	Expenditure (RON)
Alba	1	90	100	35	1 011 604
Arad	1	49	60	0	179 519
Bistrița-Năsăud	1	33	51	5	307 198
Brașov	1	92	101	44	905 772
Brăila	1	92	90	12	744 358
Cluj	1	58	60	10	351 530
Constanța	1	250	250	435	2 329 754
Covasna	1	108	110	6	880 917
Galați	1	160	169	44	1 600 705
Giurgiu	1	78	90	–	725 133
Iași	1	218	218	96	1 104 673
Maramureș	1	70	72	–	468 186
Mureș	1	94	120	–	533 327
Neamț	1	72	73	20	853 145
Sibiu	1	92	100	5	659 442
Suceava	1	55	60	–	350 243
Timiș	3	280	287	11	2 719 501
Total	19	1891	2011	723	15 725 007

Source: Strategy and Synthesis Directorate, 2006

6.9 Palliative care

Before the political changes in 1989 and subsequent reforms, the only choices for elderly and other patients with incurable diseases in terminal stages were asylums or care at home. The principles of palliative care were applied for the first time in Romania at the beginning of the 1990s, for example at St-Luca Hospital in Bucharest. The concept of palliative care came into Romania through the financed programmes by the European Community and NGOs. After the introduction of social health insurance, several additional regulations and measures followed, which were important in the development of palliative care in Romania. These included:

- recognizing palliative care competency
- introduction of palliative care services in hospitals
- palliative care as a priority of Ministry of Public Health policy
- recognizing patients' rights
- introducing palliative care as a service reimbursed by the health insurance system.

However, several problems remain to be solved. Major problems concern the prescription and price of drugs, especially opioids (simplified access to opioids), training for palliative care competence, and the absence of guidelines and protocols. In 2006, the Ministry of Public Health started to address the issue of simplification of opioid prescription.

The present provision of palliative care is done mainly through public not-for-profit organizations and covers no more than 5% of the country's palliative care needs. Developing a national plan for palliative care is one component of the National Cancer Plan currently under development. A subcommittee of Palliative Care was nominated within the Ministry of Public Health Consultative Committee for Oncology with the task of defining the National Plan for Palliative Care.

6.10 Mental health care

In 1998, Romania outlined a National Programme for Mental Health and Prophylaxis in Psychiatric and Psychosocial Pathology and in 2004 this was extended into a national mental health strategy (see below).

The main issues and challenges that mental health is confronted with are:

- in society as a whole: stigma and discrimination;
- in the mental health care system: lack of coherence that extends across more than one government department, including the justice system, which deals with compulsory detention and treatment under mental health legislation;
- in the setting of psychiatric care: conditions need important improvements;
- in development of community based services: the pace of transition is still too slow;
- in the supply and training of professional mental health staff: this remains a constant unfulfilled need;
- in overall care planning and with the challenge of comorbidity.

Mental Health Law

The Law on Mental Health Promotion and Protection of Persons with Psychiatric Disorders was adopted in 2002. This law was influenced by the 1991 United Nations *General Assembly Resolution 46/119 on the protection of persons with mental illness and the improvement of mental health care* (United Nations, 1991). The law includes provisions for the use of the least-restrictive treatment

option, confidentiality and informed consent, and it establishes detailed rules for involuntary detention. Any emergency involuntary admission is revised within 72 hours by a commission that includes two psychiatrists and a representative of civil society. Involuntary detention cannot be extended to more than 15 days without a court order. A special court was established that will judge these cases in a timely manner (WHO, 2000a).

The Law on Mental Health addresses patients admitted to institutions, and patients residing in the community, as well as provisions for mental health promotion and mental health prevention in the general population. The law has a special section on the rights of persons with mental disabilities, recognizing not only their health and health care rights but also all civil, political, economic, social and cultural rights, as mentioned in the *Universal Declaration of Human Rights*, as well as in other international conventions and treaties in this field. The law has not yet been implemented and a commission is working currently to establish the implementation plans.

The most significant change that the law induced is related to human rights issues by protecting the patient and establishing the framework for psychiatrists to use the least-restrictive treatment option and prevent them from overusing or abusing involuntary detention.

Antidiscrimination

There are other initiatives designed to tackle discrimination and to protect people with mental health problems. Government Ordinance 102/1999 stipulates that any employer with more than 100 employees who does not have at least 4% of employees with physical or mental disorders must pay an extra tax. This tax represents a monthly payment to the social solidarity fund and consists of the minimum national salary multiplied by the number of workplaces allotted to but not occupied by persons with a disability.

The National Anti-Poverty and Social Inclusion Plan (Section 6.1) includes a set of objectives for persons with a disability: to ensure equal opportunities of participation in social life; to ensure a friendly environment within residential institutions; to promote deinstitutionalization; and to ensure appropriate funding according to local needs. Concrete measures include promoting tolerance, mutual understanding and social solidarity within educational processes by offering special training for teachers and educators, developing work adjustment training programmes and employment programmes for persons with disabilities and replacing the old long-term comprehensive care institutions with long-term community-based residential care. Attainment of other objectives of the National Anti-Poverty Plan is also expected to have a positive impact on mental health, such as: eradication of extreme poverty; increasing access to education for

children of deprived social strata; decreasing the unemployment rate; as well as measures in regard to housing and equal employment opportunities.

Most initiatives to tackle discrimination, social exclusion and stigma for individuals with mental health disorders have been led by NGOs. The biggest project, financed by the EU PHARE programme *Now you know what you should care about* was conducted by the Romanian League for Mental Health, the Estuar Foundation, the Armonia Association and the Romanian–American Mental Health Alliance (Brasov). This project involved the printing of 60 000 informative material on mental health; a mental health video clip that was broadcast by five national TV channels, three local TV channels and the Discovery Channel; a radio show; and meetings with local authorities, street events and a theatre festival to raise awareness.

Penal legislation includes provision for mentally ill offenders (relating to competency to stand trial, criminal responsibility, legal representation and witnessing). Civil legislation includes provisions relating to marriage, divorce and parental rights and to the legal capacity to write wills, enter into contracts and guardianship rules (WHO, 2000a)

There are specific mental health programmes for minorities, refugees, disaster-affected populations, older people and children (WHO, 2000a). These are mainly provided by NGOs and provide only limited support. For instance, the ICAR Foundation opened three medical rehabilitation centres for torture victims (in Bucharest, Iasi and Craiova) that address the complex needs of torture survivors (including former political prisoners and refugees). In addition to medical care and psychotherapy services, the centres provide social services and legal counselling.

According to the Law on Mental Health, the families of people with mental health problems are required to be involved with the individual and the community in undertaking any measure related to mental health promotion and protection.

Mental health personnel

Romania has relatively few psychiatrists compared with other countries in Europe (4.2/100 000 population). According to a WHO report in 2001, the median number of psychiatrists varied among countries, between 0.06/100 000 population (low-income countries) to 9/100 000 (high-income countries) (WHO, 2001a). There are also issues with inadequate training levels in psychotherapy and other modern treatment methods. There are three neurologists and one neurosurgeon per 100 000 population (WHO, 2001b). The exact number of psychologists is not known. It is roughly estimated that there are 1000 psychologists working in the mental health field, although the number of

trained psychologists is likely to be much higher. An estimated 2000 nurses work in the mental health system, the vast majority without any specific training in psychiatry since previously there was no special training programme in psychiatry for nurses in Romania. In 1993, a school for psychiatric nurses was established by NGOs from Romania and Belgium and, since then, 250 nurses have graduated. In 2003, the profession of psychiatric nurse was officially recognized by the Ministry of Public Health (WHO, 2000a), which recognized the need to promote training in psychiatry for nurses. The number of other staff working in the mental health care system, such as social workers and occupational therapists is not known, but is without doubt insufficient.

Institutional care

Mental health care in Romania is still concentrated in psychiatric hospitals and psychiatric wards of general hospitals. There are no available data on the proportion of the population with severe mental illness that is treated in institutions rather than in the community. According to the National Health Statistics centre, there are 17 043 psychiatric beds, out of which 12 410 are in 36 psychiatric hospitals and 4373 in general hospitals (WHO, 2000a). Some hospitals have had day-care units since 1966. There are five psychiatric specialty hospitals for mentally ill offenders, with 600 beds. In Romania, psychiatric beds represent 13% of the total number of hospital beds. There has been an overreliance on hospitals in mental health care and a lack of appropriate resources, with many reports demonstrating that the conditions of patients are beyond any acceptable standards (see below).

Ambulatory care is provided by 51 mental health laboratories and 189 psychiatry offices. The mental health laboratories were set up in the 1970s either as independent facilities or as facilities included in a hospital structure. They fulfilled many of the functions of a community care unit and acted as a point of coordination between mental health providers. The mental health laboratories were supposed to have a multidisciplinary team (including psychiatrists, psychologists, social workers, psychiatry nurses, legal advisers and occupational therapists) and to provide a wide range of services, from mental health promotion to socioprofessional rehabilitation and research. It is estimated that only 10% of these units still work as community care providers, with psychologists, psychiatric nurses, social workers and occupational therapists. The majority provide ambulatory care only and do not have a multidisciplinary team (WHO, 2001a).

Mental health care facilities are unevenly distributed across the country. Some districts do not have outpatient facilities at all. The communication between different providers is limited, jeopardizing the continuity of care. At the

primary care level, mental health services are almost non-existent. The Ministry of Public Health elaborated a programme for GP training in depression and schizophrenia in 2001; to date it has not been adequately implemented.

New types of service such as case management, crisis response, supported housing, vocational services, community centres and liaison psychiatry have been developed under different projects, the majority conducted by NGOs. Unfortunately, some of these initiatives are not sustainable and cannot be replicated because of lack of funds and government support.

Mental health care reform

Reforms in the mental health care system in Romania have been introduced, on one hand by the reform of the whole health system, and on the other hand by the international initiatives and programmes on mental health. The changes introduced by the Romanian health system reform consisted of new ways of financing mental health services, new payment methods of mental health providers (Sections 3.3), reorganization of some long-term care institutions for persons with disabilities, and institutionalization of home-care services provision. Unfortunately, general health system reform had very little influence on the organization of the mental health system and the quality of mental health services. The international initiatives and programmes on mental health have been more successful in initiating the development of new models of care. Still, these developments, initiated mainly by NGOs and financed by external funds, are occasional, focus on specific issues/areas and have insufficient governmental support. An important step for further changes has been the WHO National Mental Health Assessment, conducted in 2000. Some recommendations of this assessment have already materialized in the adoption of the Law on Mental Health Promotion and Protection of Persons with Psychiatric Disorders (see above) and the development of the national mental health strategy.

The national mental health strategy sets actions for:

- improving and making flexible the existing structures in order to provide comprehensive and continuous services targeted to individual needs, by rebuilding and ensuring the mobility of the multidisciplinary teams of the mental health laboratories, developing crisis centres, developing the liaison psychiatry services, and setting psychiatric departments within more territorial general hospitals;
- developing community care centres in order to provide patients with services in the conditions which are the closest to their familiar environment;
- reconsidering the size of the hospitals in order to increase the efficiency and effectiveness of the mental health care system.

Although the Strategy has been approved and adopted by the Ministry of Public Health, there were no specific funds allocated for supporting these reforms. However, the Ministry of Public Health has stated an intention to devote extra financial resources from 2007 onwards for this strategy.

One of the main criticisms of the mental health system in Romania is that it fails to protect human rights and dignity (Hunt, 2005). This has often been highlighted by many local NGOs dealing with human rights and by Amnesty International. Living conditions in psychiatric wards and hospitals were the only subject pertaining to the health sector to be mentioned by the EU progress report on Romania's accession (Commission of the European Communities, 2006).

In response to these shortcomings, the Ministry of Public Health intends to upgrade some of the inpatient and long-term care facilities in parallel with the development of community-based care. However, despite the human rights obligations and policy commitments of the government, the enjoyment of the right to mental health care remains more of an aspiration than a reality for many people with mental disabilities in Romania. The issue is no longer the "what", but the "how". The main challenges could be summarized as follows:

- tackling the stigma and discrimination associated with mental illness;
- bringing some coherence to the system of mental health care where it extends across more than one government department: the most striking example of this is the role of the Ministry of Labour Social Solidarity and Family in providing long-term social care;
- ensuring that, in parallel with the development of community-based mental health services, the state benefit system evolves to support new emerging models of service provision;
- ensuring that the justice system is able to fulfil its prescribed role in the administration and monitoring of compulsory detention and treatment under mental health legislation.

6.11 Dental care

Dental care is provided through a network of 3275 ambulatory dental care facilities, where approximately 9000 dentists are active. On average, one such facility should cover 7000 inhabitants, but there is an important disparity in their distribution among the 41 districts. The extreme is represented by Salaj district, where 14 600 inhabitants are covered by one dental care facility, followed by Calarasi and Olt, with over 11 000 inhabitants per dental care unit. The distribution is in accordance with the wealth of the district, these districts

being relatively poor. Patients can directly access dental care services but health insurance covers only a few procedures. There are 88 dental procedures listed by the framework contract of the NHIF. Out of those, the reimbursement is 100% for 18 procedures, 60% for six procedures and 40% for four procedures. All of the reimbursed procedures are related to acute diseases or circumstances. Children and special categories of insured persons benefit from 100% coverage for all services. For the rest of the procedures, patients have to make an out-of-pocket payment. This explains the disparities in the distribution of dental care facilities and dentists.

6.12 Alternative/complementary medicine

In alternative/complementary medicine, the Romanian health care system recognizes acupuncture, phytotherapy (herbal therapy) and homeopathy. Only medical doctors can practice alternative/complementary therapy based on a recognized and accredited training (competence). The health insurance fund covers fully a maximum of four treatments per day for no more than 10 days. Procedures are not specified in detail.

6.13 Health care for specific populations

The Roma population, one of several minority ethnic groups in Romania, is estimated to number between 1.8 and 2.5 million. However, the official data from the 2002 census indicates only 535 000. The census records the responses of individuals, the large disparity between the estimates and census suggesting a reluctance among Roma to declare themselves as such, possibly through fear of discrimination. Homelessness and vulnerability to forced evictions, overcrowded living conditions and a lack of access to safe water and adequate sanitation are problems disproportionately affecting Roma, rendering them vulnerable to communicable diseases, including hepatitis A and tuberculosis. Other factors leading to inequalities between Roma and the rest of the population are low levels of education; poor nutrition; poor communication between health professionals and Roma health system users; lack of access to information on health issues; and a lack of identity cards and documentation, which precludes access to health insurance. A survey in 2000 found that only 34% of Roma had cover from the health insurance fund compared with the national average of 75%. Life expectancy and infant mortality rates are, respectively, ten years

shorter, and 40% higher, among Roma than among the general population (Cace and Vladescu, 2004).

In 2002, the Roma population was almost five times more exposed to severe poverty than the rest of the population. Stigma and discrimination inhibit access to health care in addition to giving rise to poverty and social exclusion. For example, some doctors reportedly refuse to treat Roma, while stigmatizing attitudes within health services may deter Roma from seeking treatment in the first place. The Government of Romania has adopted some important measures towards tackling stigma and discrimination against Roma and promoting their health. The Law on Preventing and Punishing All Forms of Discrimination (2000) prohibits discrimination, including in relation to the right to health, medical assistance and social security. The government has also adopted the National Strategy for Improving the Condition of the Roma. A Roma advisor has been appointed at the Ministry of Public Health, and Roma advisors have been appointed in some local councils. A significant initiative is the mobilization of Roma community health facilitators. The facilitators are recruited from local Roma populations and given training in health care promotion; they then work with local communities to encourage healthy behaviours and raise awareness about, and encourage use of, available health care services. The project is supported entirely by the Ministry of Public Health in partnership with local authorities. However, despite the existence of these frameworks and programmes, Roma continue to face particular obstacles to their enjoyment of their right to health and access to health services (UNDP, 2004).

7 Principal health care reforms

7.1 Aims and background to the reforms

The reforms of the health system occurred alongside major structural changes in Romanian society following 1989. In some aspects, the present situation can be compared with the period following the Second World War, when the changes in the health system also reflected changes in society as a whole. The health system imported at that time, the so-called Shemashko model, had very few connections with the tradition or the situation in Romania at that time. After 1989, a reversal occurred, changing from a model that had been in place for five decades to a model, also with foreign roots, that was closer to the one existing in Romania prior to the Second World War: a Bismarckian health insurance model. But how should a country – and Romania in particular – structure its health system? Who should decide which policy is best for a given health system? As in other countries, these questions are being asked in Romania. In some countries, the rapidly increasing costs in the health sector and the difficulties associated with accessibility to health care are the forces that drive system reform. In former communist countries, there has been a tendency to adopt measures for promoting the free market economy in the health sector as a reaction to the decades of centralism and authoritarianism from the communist period. In many low- and middle-income countries, health sector reform emerges from the measures of macroeconomic adjustment, which are adopted by governments by their own will or under the influence of international financial bodies (Vladescu et al., 2005).

In the developments of health policy after 1989, two main periods can be identified: one between 1989 and 1996, and one from 1997 to 2005. The turning point between these two periods was the general election in late 1996, after which new major health legislation was enacted and started to be implemented, namely

the introduction of the health insurance system. The change of government in 2000 was not associated with any health system reform; rather its approach included most elements of the previous government's health strategy.

Table 7.1 lists some of the most important policy documents and legislation during the period 1989 to present.

Table 7.1 Major health care reforms and policy measures from 1990 to 2006

Year	Measure
1992–1994	Simulation testing of primary care reform (to financing) in four districts
1993	A Healthy Romania, produced by team of experts, funded by World Bank
1994	Social Health Insurance Bill approved by the Senate
1994	Government Decision (no. 370/1994) to pilot primary care reform in eight districts (ended in 1997)
1995	Legislation to establish the College of Physicians
1997	Social Health Insurance Bill approved by the Chamber of Deputies (implementation started in 1999)
1998	Public Health Law (no.100/1998)
1999	Ministerial Order (no. 201/1999) placed restrictions on number and distribution of pharmacies (amended in 2005)
2002	Emergency Ordinance (no.70/2002) decentralized ownership of public health care facilities from central to local government
2002	Emergency Ordinance (no. 150/2002) modified initial National Health Insurance Law
2002	Law on Mental Health Promotion and Protection of Persons with Psychiatric Disabilities
2002	National Anti-Poverty and Social Inclusion Plan, Government Decision (no.829/2002)
2005	Government Ordinance removed National Health Insurance Fund from coordination by Ministry of Public Health
2006	Health Reform Law (no.95/2006)
2007	Ministry of Public Health strategic plan for 2008–2010

All changes that occurred in health policy after 1989 were necessarily influenced by the pre-1989 health system (Semashko). The Semashko health care system before 1989 was typical of CEECs. Central to this system was the state provision of services to the whole population, leaving limited choice to the user and seeking to achieve a high level of equity. A highly regulated, standardized and centralized system was operated through the Ministry of Public Health. The legacy of the Semashko system has been reflected in the problems faced by the health system during the initial phase of reform:

- relatively low proportion of the GDP dedicated to health care;
- centralized and inequitable allocation of resources (with “under-the-table payments” and privileges for political leaders);
- physicians usually lacking adequate motivation, as they were poorly paid and underemployed; they had a narrow clinical orientation and lacked broader knowledge of public health issues and health management, including cost containment in modern health systems;
- a vertically integrated system relying mainly on a rigid hierarchical command and control structure rather than regulation;
- financial flows independent of outcome;
- lack of health system responsiveness to local needs;
- poor-quality primary level services, inadequate referral and an overemphasis on hospital-based curative services;
- supply of beds and personnel not matched by the provision of equipment and drugs;
- alienation of citizens from responsibility for their own health, reflected by the lack of associations of interested citizens, at both national and local levels, and of an autonomous civil society (still a challenge at present): both a cause and a symptom of a passive attitude towards issues for which the state was supposed to be completely responsible;
- growing inequity in health care provision between regions and between different social groups;
- obsolete, discriminatory and potentially abusive system for mental health care.

Following the political changes of December 1989, the overall approach of the new government was to make preparations for reform but not to dismantle the existing system until a new health policy had been adopted. Meanwhile, health professionals throughout the system disregarded the authority of the Ministry of Public Health, mainly in reaction to the previously coercive system. It produced a health care crisis that grew steadily worse between 1990 and 1992, with dialogue between the unions of health professionals and the national and subnational administration becoming increasingly difficult. Faced with severe and complex problems, the main priority of the ministry was less identifying needs but rather establishing its authority.

Under these circumstances, the major decisions made by the Ministry of Public Health immediately after the December 1989 events were the following: to avoid the destructuring of the health care system prior to adoption of a new health policy; to inform both the government and the population of the difficult conditions of the system; to consider the HIV and the hepatitis B epidemics

as top priorities; to lower maternal mortality by providing free access to safe abortion; to initiate competitive admission for doctors to specialty training, and thereby reduce the gap in the ranks of health professionals (such competitions were prohibited for 8–10 years); to provide free movement of doctors in a decentralized manner, at the level of district authorities; to create the specialty of general practice; to reintroduce post-high school health education for training nurses; and to initiate managerial training for the new directors of health care units, who had been elected after the political events of December 1989 and who had to manage the crisis and lead the change. It can be noticed that, in the competition for priority issues to address, those issues with a possible immediate impact and those favoured by short-term political interests were addressed first. Coming out on top was the preoccupation with reform of health services, and not the reform of the health system.

The chosen approach to health service reform at this stage was associated with numerous risks, which became evident in the evolution of events over the following few years:

- overlooking the fact that the health of the population is determined by a complex of behavioural, environmental and biological factors, and not only health care services;
- elaborating economic and social development policies without incorporating the health dimension, accompanied by the undermining of the idea of participation and of intersectoral cooperation in reports and public debates;
- suggesting that the final aim of health services is to produce services, while, in fact, through their impact, they should produce health;
- ignoring the particularities, the evolution of health status and health care needs of the population, and, as a consequence, the demand to which the structure and the functions of the health services should be subordinated;
- overestimating the role of curative medical assistance, when the existing mortality and morbidity models indicate the need for preventive care strategies and for recuperation with community participation;
- allowing the central administration to act as a ministry of medical assistance or as a union of medical professionals, ignoring its more political and strategic role and its mission to promote health.

In the same period, Romanian specialists, with the support of foreign experts, produced in 1992–1993 a project for the rehabilitation of the health system in Romania, called *A Healthy Romania* and financed through a loan from the World Bank. The project proposed the framework of a new strategy for the reform of health services. The aims of the new strategy were to:

- reduce the state monopoly and its ownership role, which enabled it to finance and acquire health services while, at the same time, providing and managing them;
- introduce social health insurance and improve the financing of the system;
- decentralize the system, increasing the political and strategic roles of the Ministry of Public Health;
- ensure management autonomy for hospitals and the development of independent medical practice;
- develop primary medical care and free choice of a family doctor;
- develop a mechanism for accreditation, and of mechanisms for quality assurance;
- adjust personnel policies in accordance with national needs and European exigencies.

Although based on recommendations from the World Bank, the elaboration of the strategy lacked transparency and was unclear with regard to methodology. Consequently, of the major participants expected to be interested in this process, only the central health authorities were involved. In the necessary steps of preparing the policy (planning, organization, implementation, evaluation), representatives of the medical bodies (professional unions, professional associations) participated only in discussions relating to the implementation of decisions already made by the Ministry of Health. In such circumstances, it was not surprising that there was tension among the participants, with adverse effects on the final outcome. Importantly, users (public and patients) were not consulted at all, and thus the legitimacy of the process was undermined.

Until the change of government in 1996, the Ministry of Public Health demonstrated either indifference or resistance to reform activities, but persistent pressure from the World Bank, together with support from stakeholders outside the Ministry of Public Health, permitted some progress in reform components. Between 1992 and 1994, there was an initial simulation testing of different mechanisms of paying personnel in four districts carried out by four different teams involving Romanian and external consultants. The teams were from the United Kingdom (Nuffield Trust and the King's Fund), Denmark and Sweden, each working with a different district and helping them to choose the most appropriate method of primary health care delivery. The initial idea was to implement the different options and to compare them to see which was most appropriate. Between 1994 and 1996, pilot health reforms were implemented in eight districts, building on some of the recommendations from the technical assistance of these teams in 1992–1994 (Shakarishvili, 2005).

7.2 Content of the reforms

This section focuses on the two main areas of reform in Romania: primary health care and health financing.

Primary health care reform

During the communist era, health systems financing and delivery were biased toward expensive secondary and tertiary inpatient hospital care. Primary care was underfunded and relatively neglected. Most outpatient care was provided by specialists in outpatient polyclinics, or in rural health centres. After working hours, patients relied on national ambulance services to provide primary care, such that over 90% of ambulance visits was for primary care in Romania. There were relatively few doctors in general practice and they received only basic medical training and had little professional prestige. As a result, improvement in primary care was seen by the Romanian authorities as a key point of the reform of the health system and was included as the main component in the first World Bank loan. The reforms were intended to strengthen access to and quality of primary health care, improve patient responsiveness through competition among GPs, and reduce reliance on specialists and hospital care by giving GPs a “gatekeeper” function. The design and implementation of GP reforms were consistent with recommendations in the World Bank-sponsored 1993 project.

The implementation of the primary care pilot programme began in 1994 and involved a new way of financing primary health care (see below). Apart from this pilot approach, over 200 rural health clinics were upgraded and equipped with basic items for primary care. However, several reports showed that almost half of them had no doctor at the end of the primary care pilot, even when the dispensaries were upgraded with necessary medical equipment (World Bank, 2002).

The primary care reform pilot was based on one of the key objectives set for health sector reform in Romania in the early 1990s: shifting towards independent providers both in primary and secondary care and developing new payment mechanisms for these providers. This approach was intended to address some of the perceived problems with the Romanian health sector: inefficiency resulting from the imbalance between hospital services and primary care, in favour of the former; inequity owing to limitations of access to basic services, resulting from inadequate staffing (especially in rural areas) and funding for primary care; and lack of choice for patients in primary care.

Income of staff was low (compared with the average income in the economy, the ratio is much lower than in other countries in the Organisation for Economic Co-operation and Development (World Bank, 1998); and was fixed according

to professional seniority and years of service; no link existed between income and the volume or quality of services provided. Primary care facilities were part of the same organization as the local hospital and polyclinic, thus sharing one budget allocation, with decisions made by hospital managers who were always hospital-based clinicians. In an environment of overall scarcity (Romania's public spending on health services fluctuated narrowly around 3% of GDP from 1990 to 1997) and given the distribution of power in favour of hospitals, allocations for consumables, drugs and equipment were even more limited for primary care centres than for other levels of care.

In the last quarter of 1994, based on a Government Decision (no.370/1994), eight pilot districts (covering four million people) of Romania's 40 districts introduced changes in the provision and payment of GP services. The plan for piloting was received enthusiastically by district staff and generally welcomed by doctors, but it had only lukewarm support initially from the Ministry of Health (Shakarishvili, 2005). The government had previously resisted piloting, particularly experimentation with private sector approaches to service delivery, and the pilots were only able to proceed in 1994 once government and parliament passed specific legislation to authorize them. The system changed from the fixed allocation of patients to GPs according to residence to one with universal free choice of GP. Payment moved from fixed salary (set according to professional rank and seniority) to a combination of age-adjusted capitation (approximately 60% of total payment), fee for service (related mainly to prevention, mother and child care, early detection and follow up of major chronic diseases) and bonuses related to difficult conditions of practice and professional rank (approximately 40% of total). Contracts with GPs were held by District Health Directorates, terminating GPs' status as hospital employees. Terms of service introduced new requirements for 24-hour availability for emergencies. The contracts specified primary care services to be covered (which continued to be free at the point of delivery), and patients were allowed to choose their family doctor. Family doctors were expected to enrol between 1500 and 2500 patients each.

An evaluation of preliminary pilot experience was carried out in 1995 (Jenkins et al., 1995). This was too early for an effective evaluation but provided some preliminary findings. After two years, 86% of the population was covered by family doctors, with 8% higher coverage in urban areas. Few patients changed doctors, but surveys indicated that family doctors had become more "patient oriented". The output of family doctors increased, providing 21% more consultations and 40% more home visits, and 87% of GPs provided emergency coverage at night or on weekends. Doctors' incomes increased by an average of 15%, and there was some evidence of declines in informal payments (although these were already relatively low for primary care). However, differences in access between rural and urban areas persisted, as the limited financial incentives

included in the scheme were not sufficient to attract more physicians to rural areas. There was no effect on hospital admissions, suggesting that GPs had not been strengthened as the gateway to the referral system, and there was no evidence regarding the impact on key coverage indicators (such as vaccination rates) or health outcomes. The reforms had intended to introduce a competitive element through patient choice and new forms of payment. However, purchasing authorities had insufficient capacity and experience, operating in a weak regulatory environment, and faced serious difficulties in monitoring the payment scheme (especially the fee-for-service component), both in terms of the number and the quality of services reported (billed) by providers.

The pilots continued until 1997, when they were discontinued by the new government. The pilots were not evaluated further. However, national and district staff involved in the pilots played key roles in developing subsequent reform regulations, and a number of adjustments were made as a result of the pilot experience. These included greater specificity in the contracts regarding doctors' responsibility for primary care, adding a "practice allowance" to the capitation payments for doctors to help to cover capital and recurrent expenditure, doubling capitation payments for family doctors practising in remote or low-income areas and permitting doctors to charge for vaccinations to children not on their "lists" (Vladescu and Radulescu, 2001).

Several additional lessons can be drawn from the primary care experiment from the early 1990s in Romania.

- The proposed reforms created the possibility of improving primary care, but the success of reforms depended not only on establishing appropriate incentives in the payment system but also on developing adequate capacity within the purchasing authority (district health authorities) for regulation and monitoring of GPs. Therefore, changes in the payment and delivery system need to be accompanied by adequate training for the staff of health authorities, both at the national and, especially, the local level.
- Changes in the employment and payment system of GPs need to be accompanied or preceded by intensive training for family doctors, to allow them to adapt to their new roles and to increase credibility for reforms among patients and the medical profession.
- The training needs generated by reforms outstrip available training capacity, especially if not properly planned from the beginning of the reform programme.
- While the pilot had the potential to succeed in urban areas, nearly half of the Romanian population lives in rural areas, where many of the stated aims of the project cannot be achieved because of the lack of adequate coverage by medical personnel and, therefore, lack of choice/competition between

providers; the difficulties in accessing health facilities; and inadequate basic medical facilities.

- Some of these problems could be overcome by using new approaches that can maximize the existing scarce resources; for example, encouraging group practice (where possible) holds promise for addressing a number of issues, including pooled use of equipment and administrative assistance, and improved coverage for after-hours care.

In the last two years, family doctors received more responsibilities within the Ministry of Public Health primary care policy. For instance monitoring of Type 2 diabetes patients is no longer the responsibility of specialist physicians, and the new programme for assessing the health status of the population is run through the family doctors' offices. Those responsibilities have been accompanied by an increased budget for primary care.

Health financing reform

The Social Health Insurance bill was approved by the Senate in 1994 and by the Chamber of Deputies in July 1997. The introduction of health insurance was expected both to increase resources available to health (through the compulsory health premiums), and to serve as a catalyst for further system reforms, including improving system efficiency. This reform initially generated countrywide support, but for different reasons: ministries of finance, for example, hoped for increased efficiency and cost control; while doctors expected higher salaries. Eventually enthusiasm waned as it became clear the reforms would entail a long, ongoing, iterative process.

Financing based mainly on general taxation was replaced with a system based on mandatory insurance premiums paid by the employee (6.5%) and the employer (7.0%) as a fixed percentage of income. In addition, pensioners, people receiving social assistance, the unemployed, conscripted soldiers, and people in custody or under arrest are covered. Other categories, such as children and young people, disabled people and war veterans with no income and the dependants of an insured person (wife, husband, parents and grandparents) were also covered.

While the Social Health Insurance Bill stipulated that the NHIF would be a self-governing body created by an election process, the government was obliged to choose a simplified solution for the board of the NHIF during the implementation phase. Trade unions, local elected councils and parliament were regarded as representatives of insured people and were asked to nominate members for the board. The first board and its president, who was nominated by the Prime Minister, had the task of organizing the elections. In 2002, the law was modified in such way that the NHIF became coordinated by the Ministry

of Public Health; the NHIF's president was nominated by the Prime Minister with the agreement of the Minister of Public Health and he became a member of the government as Secretary of State. In this way, the degree of autonomy stipulated by the initial bill was reduced further. In 2005 the initial intended autonomy of the board was re-established by a government ordinance, which eventually became law; this took the NHIF out of Ministry of Public Health coordination. However, elections were still not achieved.

The insurance law contributed significantly to the development of the private sector in health. Prior to the law, access of private health care providers to public funds was rare. Moreover, the previously state-employed GPs became independent practitioners, the majority of them being self-employed.

7.3 Policy participants in the reform process

In this section reference will be made to the principal individuals, groups and institutions with political interests in health sector reform, focusing on their involvement in shaping the reform of the Romanian health system.

Central level

To a large extent, the governmental system in Romania continues to operate as a centralized command and control bureaucratic system. This focuses important political power at top levels in the ministerial hierarchy. In the case of the Ministry of Public Health, the minister and the high-level technocracy have originated a number of reforms or adopted reforms suggested by the World Bank and groups of parliamentarians. The Ministry of Public Health maintains the responsibility for developing national health policy and dealing with public health issues; at local level, the Ministry of Public Health acts through the DPHAs. The Ministry of Public Health plays a major role in the decision-making process in health policy; almost all the major health policy documents have been initiated at this level.

The NHIF sets the rules for the functioning of the social health insurance system and coordinates the 42 DHIFs. The NHIF negotiates the framework contract that sets up the benefit package to which the insured are entitled, together with accompanying norms. The NHIF also decides on the distribution of funds between districts. The NHIF has the authority to issue implementing regulations (rules, norms and standards) mandatory to all DHIFs in order to insure coherence of the health insurance system.

The Ministry of Finance is the public body in charge of monitoring the spending of public funds in accordance with state regulations. Since the mid-1990s, the Ministry of Finance has been in a position of substantial influence for the budget approved by the parliament for the NHIF; in this way it could be seen as an important (indirect) player in the field of health policy.

Although the constitution places the parliament in a key position in the policy process, the autonomous role of parliament has been weakened by the predominance of the majority party coalition in power in the period following 1989. Major health reform laws passed in the parliament during this period were heavily influenced by the party in power (or coalition of parties, as was the situation between 1996 and 2000). The Ministry of Public Health, and after 1999 the NHIF, also had constant and prominent input into the content of any given legislation voted by the parliament. Major legislation in health was also issued by the government, bypassing the parliament by using emergency ordinances, such as Emergency Ordinance 150/2002, which modified the initial Health Insurance Law from 1997, or the latest law on health care reform in 2006.

Professional provider organizations and trade unions

The CoPh was established in 1995 (Section 2.3), but physicians have historically been important participants in the reform process. Physicians were particularly concerned before 1989 about their relative lack of official status, their low official income and the limited technological environment in which they worked. With a view to improving their income, the profession supported the health insurance system and increased private medicine in the early 1990s. Different opinion surveys indicate, however, that this initial reformist zeal has now weakened (Centre for Health Policies and Services, 2000, 2003). It is possible that physicians (especially in hospitals) have come to realize the benefits to them of under-the-table, untaxed payments from patients (which also existed before 1989). Also, they are still largely unaccountable for their work in the present system, a situation that could change with continued reform and increased coherency within the health insurance system. Additionally, the first years of health insurance did not bring spectacular improvements in their social and financial status, and for some of the physicians more administrative work was required for incomes similar to those before the introduction of health insurance system in Romania.

It should also be mentioned that, even though the medical profession is not politically strong in an organizational sense, individuals are important in their links with parliament (approximately 50 members of the parliament were/are medical professionals, including the President and the Vice President of the

Health Commission) and political parties, and particularly in their occupancy of important positions in the Ministry of Public Health hierarchy.

This raises another issue related to the analysis of health sector reform: health care reform is planned and implemented by the medical elite, who have a vested interest in scientific research and high-technology medical activities. Studies have indicated that the medical profession maintains almost exclusive influence on policy-making and strategic decisions in Romania (World Bank, 2001). Referring to central and eastern Europe in general, the 1996 *World Development Report* is clear: “The medical lobby is well placed to steer policy in CEEC and the NIS [newly independent states of the former Soviet Union] because, in contrast with most market economies, the health minister is often a physician, as are many parliamentarians. As a result, the Ministry of Health can easily become the ministry of the health profession” (World Bank, 1996).

The Romanian Medical Association and the Society of General Practitioners operate as traditional professional associations, acting more or less successfully in shaping the process of health policy-making in their specific area of interest (Section 2.3).

The College of Pharmacists issues the legal agreements for new pharmacies; consequently, it is important in influencing the number of pharmacies in the country. The Order of Nurses and Midwives has mainly been influential in harmonization of professional training requirements with the EU.

Political parties

A review of the party political platforms in the general electoral campaigns reveals that health sector reform was not a formal party priority. Health sector reform was not raised as a significant political issue in the 1992, 1996 or 2000 local elections. Further, no major influential political personality became involved in a coherent promotion of the health system reform. In general, the involvement of politicians is minimal, and all discussions on health reforms are held at the level of the Ministry of Public Health, with isolated involvement of participants such as the CoPh or certain unions, whose approach is rather reactive and strictly limited to the interests of their own members.

However, the relevance for health sector reform of the development of the multiparty system should not be discounted. The multiparty system is an important element of the political scene: the positions, alignments and power of the political parties very much determine the overall political orientation of the government to the process of social transition in Romania. The vote in parliament is not homogeneous within a party and is not necessarily correlated with the societal values that the party is promoting (left-wing parties promoting privatization of public health facilities, including hospitals, is a recent example).

Parties have direct influence on the health care sector through the legislation dealing with health matters, especially the Health Budget Law. It should also be noted that, generally, important officials within the Ministry of Public Health and the local health authorities were/are also members of the ruling party, constituting another source of political influence on health policy.

Universities

Even if the medical universities per se have not been important participants in health sector reform, the medical academic world represents a significant pole of power according to the current legislation, in force for the last three decades. Clinical professors are automatically nominated as heads of department in the university hospitals, and in this capacity they decide how resources are utilized at the hospital level; they are also in charge of the training of physicians and with all types of recruitment and promotion in medical careers. The majority of the senior public officials who operate within the Ministry of Public Health and other health authority structures are also recruited from the academic medical world. For instance, with two exceptions, since 1989 all the Ministers of Public Health have also been members of a university faculty. Also, advisors to the Prime Minister and presidency have come from the same clinical academic area.

Community involvement

There has been little or no popular debate or consultation on health sector reform. This raises an interesting point concerning the limited development of civil society in Romania. The legacy of the pre-1989 period and the restricted development of a democratic movement since the revolution are characterized by a relatively inactive civil society. This is expressed in the lack of a political debate on health and health care, the limited definition and articulation of group health needs and interests through autonomous institutions and the weak aggregation of interests through political parties. While trade unions in the health sector have developed, they have not, as yet, become a significant force. Despite notable exceptions, there has been limited development of NGOs or collective and community-based groups and associations in the country. In short, the communist regime did not encourage popular involvement and there has since been no development of an active civil society interested in health sector reform.

Pharmaceutical companies and dealers

Particularly since the development of the health insurance system, the pharmaceutical industry has become a significant player in the system, being in direct contractual relations with all major health care providers, and the expenditures on drugs and other medical consumables have almost doubled (World Bank, 2002).

Nongovernmental organizations

NGOs have specialized in working in delivering health and social services in Romania. They focus mainly on areas such as health promotion, reproductive health, family planning, HIV/AIDS and community care. Romania has come under the spotlight of the press in other countries over issues relating to orphanages, persons with disabilities and children with AIDS. This led a number of international NGOs to become involved in such areas in Romania. After a period of time, the international NGOs withdrew from Romania but continue to support significant local NGO activity in some specific health areas, such those mentioned above, but, with very few exceptions, their interest in health reform has been absent. Therefore, it is unlikely that they will be involved in any longer-term process of agenda setting with a view to sustainable health sector reform.

Patients' Associations

Formal consultation and involvement of patient associations into the decision making process was initiated in 2007. See section on Patient Participation/ Involvement.

Multilateral and bilateral external agencies and the role of the World Bank

First, it should be mentioned that the two major reform projects – primary health care and health insurance – show a clear influence from health systems of other countries. The introduction of capitation payments and contracting draws on the experiences in the United Kingdom, while the health insurance system draws on the German experience. Both projects relied heavily on consultants from these countries.

There is a growing presence of international agencies involved in the health field, for example the United States Agency for International Development (USAID), the EU (through PHARE and other specific programmes, especially after Romania was invited to join the EU, and began the pre-accession procedures), the governments of Germany and Switzerland, the British Council,

the United Nations Population Fund (UNFPA) and the United Nations Children's Fund (UNICEF). Finally, the World Bank has also been an important player in the process of health sector reform in Romania.

World Bank

The World Bank project started in 1992 and involved a loan of US\$150 million. Originally designed to terminate in June 1996, it was extended to 1999 to allow the government to spend the remaining monies. The project had the following major aims: (1) upgrade rural dispensaries, (2) improve reproductive health, (3) train health practitioners, (4) procure and distribute drugs and consumables, (5) improve management of emergencies, (6) strengthen health promotion, (7) develop a national health strategy, (8) develop a health information system, and (9) establish a school of health services and management. The project outcome was rated as moderately satisfactory on a six-point scale (highly unsatisfactory, unsatisfactory, moderately unsatisfactory, moderately satisfactory, satisfactory and highly satisfactory). As a comparison, the US\$ 34 million Estonia project was rated highly satisfactory and the US\$ 56 million Hungarian project was rated as moderately unsatisfactory (Johnston, 2002).

A second loan project of US\$ 40 million was approved and started to be implemented from 2000. The six-year Adaptable Program Loan in two phases sought to further strengthen the health reforms while supporting additional investments, especially for district hospitals and emergency medical services. The project retains a strong focus on infrastructure and is not providing direct project support for strengthening health insurance: the EU has emerged as primary donor for insurance. Rather, the project seeks to combine investments with support for systemic reforms (e.g. piloting an integrated approach to emergency services; Section 6.5).

The impact of the World Bank on health sector reform in Romania has been important. The primary care project outlined in Section 7.1 follows on from the World Bank-sponsored King's Fund/Nuffield Institute for Health report and comes within its programme of health sector reform. The World Bank has been instrumental in the training of a wide selection of personnel. Although the World Bank was not involved in the initial development of the health insurance system, it has played an important role in reshaping the structure of the health system.

The overall position of the World Bank, however, is complex and difficult to define. Certainly the World Bank is a major agenda setter and promoter of a market approach to health sector reform in many developing countries. In CEEC, it is quite possible that the situation is somewhat different. While the overall support for a market-based system of health care remains undiminished, the

context in which it is manifested in the policy-making process shows important differences. The *World Development Report* (World Bank, 1996) provides some guide in this respect. The report stressed the range of circumstances that can lead to gradual or rapid reform strategies in CEEC (see below). Historical, political, cultural and macroeconomic factors can be important in determining the reform strategies (World Bank, 1996). Millard (1992) noted that the World Bank had reservations about the introduction of a health insurance system in Poland and gave warnings concerning the introduction of co-payments and direct health care charges. In Romania, the World Bank has also looked to restrain and guide the process of health insurance reform. A clue to its reservations here is offered in the *World Development Report 1996* (World Bank, 1996), which expressed three concerns over health insurance reforms: the tendency towards structural deficits given the need to subsidize the non-employed population, the increase in the cost of labour and the incentives to work informally, and the lack of control over spending. An additional concern in Romania was that the health insurance scheme should be in accordance with other reform projects, such as pensions, and that these should be seen and considered together.

A further difficulty in interpreting the role and importance of the World Bank in CEEC is that its major impact on health sector reform may be indirect through its pressure on national governments to restructure the size and operation of the public sector in general and restrict public expenditure. The *World Development Report 1996* (World Bank, 1996), for example, sets out a number of general prescriptions for government, including “rightsizing” government, defining new spending priorities (e.g. moving away from subsidies), avoidance of fiscal deficits and overhaul of the budget management system. The impact of more general reforms of government on the health sector should not be underestimated.

World Bank involvement in Romania should be seen in the context of its overall approach to the transition process in formerly socialist economies. This is put forward in the *World Development Report 1996*, which outlines a prescription of freeing up economies, fiscal discipline and control over inflation. In the social policy field, attempts should be made to “ease the pain of transition” (idem) but also to push the transition process forward. Health policy options proposed include the need to:

- focus on health improvements through changes in lifestyle and tackling pollution and occupational risks;
- improve health care delivery through more effective resource allocation, provider competition and involving the private sector;

- achieve the correct funding balance between taxation and social insurance in addition to the correct balance between provider payments through fee-for-service and capitation payments.

Other external agencies

UNICEF operates four programme areas (women's health, children's health, family education and children in especially difficult circumstances) in addition to planning and social policy development and advocacy.

The WHO supports targeted interventions and provides technical assistance in drug policy, mother and child health as well as in the newly established mental health strategy.

The UNFPA has been involved in the Making Pregnancy Safer initiative and reproductive health, where the agency and its partners have influenced policies and developments.

EU/PHARE has been involved in dispensary upgrading and equipping, vaccine storage and delivery, a hepatitis B vaccine programme and support to DPHA management. The health sector received funds from the PHARE Programme for Health of approximately 25 million ECU in 1991, directed to laboratory equipment for dispensaries, drug supply and training. In 1992, the Ministry of Public Health received 1.5 million ECU (EU funding) to be used for the rehabilitation of the cold chain within the National Vaccination Programme and the financing of an elderly community care programme. Starting from 1997, the Ministry of Public Health and the NHIF received over €10 million on different programmes and from 1998 the Ministry of Public Health started to participate in the public health programmes of the EU (such as health promotion, cancer prevention, HIV/AIDS). It is expected that EU involvement in the health reform area will increase in the coming years.

USAID has been involved in training programmes and the development of specific curricula for the health sector and also in efforts to reform the reimbursement of hospitals through the diagnosis-related group project; a US\$ 5 million programme has been dealing with the reproductive health issues in Romania since 2000.

The British Council has a relatively minor role in the training of nurses and doctors, while the United Kingdom Department for International Development is involved in programmes complementing the World Bank loan.

In addition to the above, there are bilateral agreements with different national governments for specific forms of cooperation. For example, the German Government has provided assistance in the development of the health insurance policy proposal and the Swiss Government is involved in supporting

the development of emergency care and neonatal care. Other development agencies with a presence in the Romanian health care sector include the Open Society Foundation, UNAIDS, Japan International Cooperation Agency and the Canadian International Development Agency.

It should be mentioned here that in Romania a lack of donor coordination was cited by stakeholders as a concern that could lead to overlapping or competing programmes, or to overinvestment in infrastructure and equipment relative to available recurrent budgets, and that conflicting donor advice could be counterproductive (Johnston, 2002).

7.4 Policy process and reform implementation

In comparison with other CEEC, the pace of reform in Romania has been relatively slow. In attempting to explain this, one can find both political and technical reasons, as outlined below.

Major changes in an area that concerns every member of a society such as health care cannot be achieved unless major politicians are involved, appropriate information is disseminated and citizen support is secured (both from providers and recipients of health care). While, in other countries, the changes in health policies led to wide media coverage of the extensive analyses and debates by institutes and professional analysts, in Romania, media debates were mostly based on sensationalist coverage related to the failures in the day-to-day aspects of the system's operation rather than the causes and possible ways to resolve these deficiencies. What we witness in Romania is the concern of both the population and specialists with the continuous deterioration of health indicators and medical care quality, reflected by many opinion polls and statements (Section 2.4), coupled with an almost complete lack of debate on this issue in the media; even the discussion and passing in the parliament of the Social Health Insurance Law went almost unnoticed by the public. Political involvement is minimal, and all discussions on health reforms are held at Ministry of Public Health level with the isolated involvement of participants such as the CoPh or certain unions, whose approach is rather reactive and strictly limited to the interests of their own members.

In this context, the lack of a body of professionals in policy analysis caused important decisions to be taken without proper evidence. Also, the provision of health services in the "command and control" system, where the Ministry of

Public Health and the local bureaucracy played a part in almost every decision of the health units, severely limited the ability of managers and political decision-makers to gain experience in using information, incentives and competition to achieve the desired results. In this context, there is currently very little support, both at macro and micro level, for an increase in managerial capacity.

To give only a few examples, many of the decisions related to the financial implications of the provisions of the Health Social Insurance Law were not based on detailed financial studies. Many of the questions that were essential for any analysis were asked too late or not at all. These questions include the following:

- What would be the social consequences of the new financial undertakings?
- What type of redistribution mechanisms (by age, gender, income, etc.) would be the basis for the new financial mechanism?
- What would be the consequences of introducing insurance premiums for employees, employers and other categories of personnel?
- What role could be played by additional private insurance? Which services can be provided privately? How much (and which parts) of the health system will be public and how much private?
- How, if it is desired, can unofficial payments be reduced?
- Who would develop the individual contracts for the provision of services in the insurance system and how?
- What would be the basis for ensuring that capital investments and advanced medical technologies gain maximum benefits for public health from limited public resources?

While it would appear obvious that the answers to such questions are essential in making coherent political decisions, such questions were not asked in the two chambers of the Romanian Parliament around the time the insurance law was passed (1994 and 1997). At the same time, a few studies with foreign funding (PHARE, World Bank, UNICEF) reached worrisome answers for many of these questions (Vladescu, 2005). However, political concerns largely took precedence over the data provided by foreign experts, the views of the main participants in the health sector (such as those described in Section 7.3), and the social values relating to issues such as the degree of decentralization of the system, management of the new structures and the role of equity and accessibility in the new arrangements. Although various documents were developed (for example *Reform Strategy in the Health Sector* or the *White Book of the Reform*) and were uncontested by the main participants in the

health sector, because of the lack of substantial debates over these documents their impact was rather low.

For all the reform decisions in the health sector, the Romanian authorities used a topdown approach. For such an approach to be successful a series of prerequisites must arguably be in place:

1. The circumstances that are external to the body implementing a certain policy should not impose constraints that would invalidate the desired process.
2. The necessary resources and sufficient time should be available for the programme.
3. Each stage of the implementation process should have the resources available in the desired mix.
4. The political vision that is desired to be implemented is supported by a solid theoretical base.
5. There should be only one body responsible for the implementation of the policy, and it should not rely on other bodies for the success of the action; if other bodies are involved, reliance should be minimal.
6. There should be full understanding and agreement on the goals to be achieved; this should be maintained throughout the entire period of the implementation process.
7. It should be possible to define clearly, in detail and sequentially the tasks assigned to each involved party, throughout the implementation process.
8. There should be excellent communication and coordination between the different bodies involved in the programme.
9. The persons with authority should be able to demand and obtain control over the bodies implementing the programme.

Looking at this list of requirements, it is clear that few of these were present in Romania. Also, frequent staff changes in the management of the central and local health authorities caused very fundamental political decisions to be continuously questioned and amended according to the ideology and values of the successive ministers. This has meant that key reform legislation such as the insurance law ended up being, after successive amendments, very far from the initial intention of the parliament which passed it (e.g. for health financing; Section 7.2).

7.5 Future developments

The Ministry of Public Health has elaborated a new comprehensive health law (Health Reform Law.95/2006) in order to attain the three broad objectives for 2005–2008: (1) effective and equal access of citizens to basic medical care; (2) increase in the quality of life by improving the quality and the security of medical services; and (3) improvement in health and demographic indicators. The 17 titles in this law relate to, among other things, social health insurance, private health insurance, hospitals, community care, primary health care, pharmaceuticals, emergency services, public health, national and European health cards, national health programmes, professional liability, and establishment of a national school of public health and management. This law also includes measures for:

- enhancing the solidarity principle by extending the contribution payment to certain categories previously exempted (e.g. pensioners and Romanians temporarily working abroad), because in 2005 approximately 5 million people were paying for 22 million beneficiaries of the health insurance system (Section 3.2);
- reallocation of budgets within the health care system along with specific measures to increase utilization of primary, ambulatory and home care services, such as better payment for family doctors and for specialists working in ambulatory clinics, in order to encourage an increase in their activity; and development of special home care programmes for the elderly and patients from isolated areas, in order to prevent their admittance to hospitals;
- financial sustainability by increasing the financial autonomy of the NHIF, increasing financial control and building managerial capacity at local level.

For the period 2008–2010, the Ministry of Public Health has announced the restructuring of the public health authorities with the aim of achieving some flexible structures for the population. This forms part of the decentralization plan for the health system. The Ministry of Public Health web site has presented this decentralization plan for health care administration, in which the main changes are reflect a greater emphasis on the eight regional authorities and changes in the line of authority. In each of the eight regions, there will be: a regional agency for programmes, a state regional sanitary inspection, a regional agency for medical assistance and a regional institute for public health. Two new public health institutes, adding to the five existing ones, will be founded in Constanta and Craiova. All these will be subordinated to the corresponding national agencies that are under Ministry of Public Health coordination, and they will have subordinate authorities at district level.

8 Assessment of the health system

8.1 Stated objectives of the health system

Romania has never had a formal health policy document; rather, health care objectives are stated alongside others in the government's general policies. The Governing Programme 2000–2004 stated that “health care should be a public social good, accessible to all Romanian citizens, irrespective of their ability to pay based on free and equitable access to health services”. This programme established a strategic objective: “a healthy Romania, with a reduced morbidity and lower premature deaths” (Government of Romania, 2000). In December 2001, the government set four main priorities on which specific strategies have been developed:

- national hospital reform strategy
- drug policy strategy
- improving health financing strategy
- woman, child and family health strategy.

The new government elected at the end of 2004 has promised to deal with the most important problems considered to be at the root of low performance and the dissatisfaction with the current health system (Section 2.5). Although a formal health policy document has not been issued, health care objectives for 2005–2008 are stated in current government general policy (Government of Romania, 2004):

- ensuring equal access to basic health care
- increasing the quality of health care services
- bringing the health status of the population nearer to the EU level.

The 2006 Health Reform Law (Section 7.3) was developed by the Ministry of Public Health in order to make progress towards achieving these 2005–2008 objectives.

8.2 The contribution of the health system to health improvement

As yet, there has been no formal evaluation of these health reform strategies. However, available data show that, while there was a slight increase in health financing, mainly in the hospital and pharmaceutical sectors (Section 3.1), health indicators have not improved significantly between 2001 and 2004, with the exception of infant mortality and maternal mortality rates (Section 1.5).

The *World health report 2000* (WHO, 2000b) ranked the Romanian health care system 99th in terms of its overall performance and 111th based on its effect on the health status of the population. The same report ranked the health system slightly better in terms of the individual objectives of the health care system: 80th for health attainment, 73rd for responsiveness and 79th for fairness of financial contribution. Data prior to 1999 were used for the analysis; since then, many of the indicators employed have improved and a better performance would be expected. The past five years recorded a slight improvement of population health; some improvements can be clearly linked to programmatic interventions while others can be explained by the general development of the country.

A study of avoidable mortality in Europe with data extracted from WHO mortality files for the period 1990–2000 compared avoidable mortality for men and women in 20 European countries (Newey et al., 2003). In both 1990 and 2002, Romania had the highest level of treatable mortality (followed closely by Bulgaria), and Romania is the only country that does not show improvements in treatable mortality over the ten-year period for men, although slight improvement for women can be seen. Moreover, over 40% of all-cause mortality in both time periods could be attributed to treatable diseases. Analyses of preventable deaths (from lung cancer, motor vehicle and traffic accidents and cirrhosis of the liver) show similar patterns. Romania has the second highest rate of preventable deaths for men and women, followed by Hungary. Rates of preventable deaths increased for both men and women; for the latter this is a trend in most countries (attributed in large part to the increase in prevalence of smoking among women; Tyczynski et al., 2004) and not unique to Romania. These findings overall suggest that significant health gains can be achieved through improved access to effective health care and public health policies.

8.3 Distribution of the health system's costs and benefits across the population

Fairness in financing

From the financial perspective, it is important to highlight the substantial increase in the health budget between 2001 and 2004, a trend that has continued to date. Whether this increase has improved the fairness of financing cannot yet be accurately assessed; more investigations and analysis are necessary.

Data from the 1990s in Romania suggest that financing has been relatively fair, as measured by the proportion of household disposable income directed to health spending. For instance, the index of fairness of financing was estimated to be 0.901, compared with the EU average of 0.890 (Murray et al., 2003). Moreover, less than 1% of households had catastrophic health costs (meaning they represented more than 40% of total disposable income), compared with the EU average of 1.5%.

Between 1998 and 2004, social health insurance constituted an increasing share of total health expenditure, rising from 64.6% to 82.7% (then down to 75% by 2007). The contributions are proportional, neither progressive nor regressive.

Regional inequity created by the local collection of insurance contributions by DHIFs between 1999 and 2002 (with 25% of revenue being redistributed through the NHIF) was probably reduced by the transfer of revenue collection to the national level (Fiscal Administration National Agency of the Ministry of Finance). Moreover, this reform also served to reduce inequity created by the significantly lower risk profiles and greater revenue-raising capacities of the two special health insurance funds (for employees of government ministries; Vladescu et al., 2005). At present the NHIF allocates funds to the DHIFs in accordance with a formula based on the number of insured persons and the mix of population risks. Overall, this has increased the fairness of the financing system.

Further contributing to equity in the system is the extensive set of exemptions from insurance contributions and cost sharing. Most non-wage-earners are exempt from contributions, including children, persons with disabilities, war veterans, patients covered by the national health programmes and pregnant women (for more details of coverage and contributions see Section 3.2). However, many more categories than these had exemptions under the former government between 2002 and 2004; as a result, by 2005 a total of 5 million people were paying insurance contributions while 22 million were entitled to

benefits. The current government, by the new Health Reform Law (95/2006), decreased the number of categories with free membership, requesting contributions for some previously exempt categories (e.g. a contribution will be raised from pensioners whose income is over the pension taxation base). It is too early to tell what effect these reforms will have on equity.

Taxation has become less important, although still significant, in health financing in Romania, falling from 100% of total health spending in 1990 to only 15.8% in 2004. However taxation is regressive in Romania, since on 1 January 2005 a progressive income tax scheme was replaced by a universal flat income tax rate of 16%.

Data on private spending is scarce (Section 3.3). Private spending on health care in 1996, estimated by a study that analysed data from the Integrated Household Survey (Marcu and Butu, 1997), was 1306 billion lei, or approximately 29% of total health expenditure. WHO National Health Accounts data (2002) for Romania show that private expenditure represented 34% of total health expenditure. This is relatively high among European countries, although it probably underestimated the amount as it would not capture the full amount of under-the-table payments (illegal payments to providers for services that are nominally free), a highly regressive form of payment.

Distribution of services and resources for the population

The scarce data available on distribution of health care services and resources in Romania do suggest that there are serious inequalities. There are some striking inequalities in mortality indicators and utilization indicators between districts; for instance, there are twofold variations between the upper and lower quartiles for the maternal mortality rate and the abortion rate (UNDP, 2005). Differences are particularly stark between rural and urban areas. For example, nearly half of the Romanian population is rural, yet in urban areas there were 3759 pharmacies registered while in rural areas the figure was only 1102. Specialized services such as mental health care are also unevenly distributed across the country.

An estimated 7% of the population was not registered with a GP in 2005 and consequently could not benefit from any public health services. These people are usually marginalized groups, such as Roma. A survey in 2000 found that only 34% of Roma had cover from the health insurance fund, compared with the national average of 75%. According to one report, *Assessment of the health status of Roma and the related health care needs* (CEEN, 2006), estimations from several DHIFs give reason to believe that as many as 50% of Roma are uninsured in some districts. The key obstacle to insurance is the amount of approximately 600 RON (€180) that needs to be paid as back payment for previous years once one registers with the health insurance. Also, many Roma cannot afford to pay

the monthly premium, for lack of sufficient income or resources. The minimum wage in Romania is 440 RON (€130). Another obstacle to registering with the health insurance is the need for identity documents, which many Roma do not possess. Existing regulations to obtain identity documents are, in principle, transparent, but many Roma are not able to take the necessary steps because of the bureaucratic application of procedures.

Without health insurance, people only have the right to a basic package of health care. This basic package comprises treatment of tuberculosis and several chronic diseases, such as diabetes; free contraceptives; and emergency care, which includes up to three days of hospitalization. As a result of these health and other inequalities, life expectancy and infant mortality rates are, respectively, ten years shorter and 40% higher among Roma than among the general population (Cace and Vladescu, 2004).

8.4 Efficiency of resource allocation in health care

The Romanian health care system has some features indicating a misallocation of resources, both between different levels of the system (primary and hospital care) and between different sectors (e.g. public health, emergency services and mental health). The government sets the spending level for each health care sector, and addressing these problems is the focus of much of the recent and planned reforms. In 2004, Romania had over 142 000 hospital beds, or 6.5/1000 people (Section 5.1). The ratio of beds per 1000 population is lower for acute care, at 4.4, decreasing dramatically from 6.9 in 1990. Both ratios are comparable to the average figures for the EU: 5.9 and 4.1, respectively. However, compared with other European countries, Romania has a high inpatient care admission rate, 24.26 in 2006, compared with the EU average of 17.26 (WHO Regional Office for Europe, 2007a) and Sweden (15.6 in 2005) or Norway 18.75 in 2006), reflecting the low efficiency and underutilization of primary and ambulatory care services (a legacy of the communist system). The high rates of inpatient admission also reflect the lack of cooperation between inpatient care and social care providers, many patients being hospitalized mainly for social rather than medical reasons.

Previous reforms have only had a limited effect on allocation inefficiency. The Ministry of Public Health has elaborated further reforms in the form of a new comprehensive health law (Health Reform Law 95/2006) aiming for the reallocation of budgets within the health care system along with specific measures to increase utilization of primary, ambulatory and home care services,

such as: better payment for family doctors and for specialists working in ambulatory clinics in order to encourage an increase in their activity; and development of special home care programmes for older people and patients from isolated areas in order to prevent their admittance to hospitals. The National Mental Health Strategy also highlights the need for more community care centres and reconsidering the size of hospitals in order to increase the efficiency and effectiveness of the mental health care system, but implementation has been slow.

The continuous rise in the cost of pharmaceuticals during the transition period has caused concern to the Ministry of Public Health and the government in general. However, measures for cost containment and drug regulation have been introduced on an ad hoc basis. Mechanisms used to monitor and analyse pharmaceutical consumption are limited by the lack of capacity and of qualified personnel within the Ministry of Public Health and the NHIF. Currently, pharmacoeconomics is used neither in decision-making nor in drug-consumption analysis. Future challenges to the pharmaceutical market are the gradual price increase of drugs owing to the closeness of the EU market and EU accession.

Another important sector in the recent reforms has been emergency care. Primary care providers, especially family doctors, have no incentive to provide home visits and there is no network of primary care providers that could offer services for emergencies in the evening or at night. As such, patients in big cities customarily call emergency services directly for problems that may only require ambulatory care. As a result, the emergency services are overloaded and records indicate that “real” emergencies account for less than 25% of all calls. Various projects have been implemented with the support of the World Bank to improve this situation (Section 6.5).

8.5 Quality of care

Quality of care is not regulated by a specific act. Law 95/2006, which regulates the entire health system, has some references to quality for sectors of care, such as hospitals, laboratories and primary care facilities. All the sectors need quality improvement, and the institutional framework is regarded as an essential step towards better quality of health care. The most advanced in this regard are the laboratories, where more and more laboratories are achieving accreditation under the International Organization for Standardization. Challenges to quality of care occur at at least two levels. The first is infrastructure, where the need for improvement is obvious and where disparities between regions and counties are

huge and visible. The most obvious is hospitals. The disparities can be found sometimes in the same hospital. The second level is policy-making, which has room for much improvement and is recognized by the government as a priority. A stronger policy could lead to essential changes in the managerial and organizational culture towards quality improvement. This represents one of the main challenges of current and future health care policies.

9 Conclusions

The Romanian health care system is currently in the process of rapid transformation. Probably one of the main problems with the Romanian health care system is the lack of a clear vision of its future and the lack of a coherent project for its health system, which is shared and accepted by the main stakeholders. The increased turnover of decision-makers within the health system has resulted in a number of health projects and strategies, often developed with international support, that are then abandoned by a new political team from the Ministry of Public Health, which started the development of its own “health policy”. For these reasons, many health policy areas are still not touched by serious reforms, for example human resources training in health care or hospital organization, which is very similar to that before 1989.

One of the main problems arising during the first years of reforms after 1989 was inadequate authority for, and coordination of, the whole process of change. It can be said that, after the 1989 revolution, instead of one health care system functioning inappropriately, there were several health systems with inadequate performance. The primary health care system has almost no functional links with the hospital system, which is also not integrated with the outpatient care (ambulatory system).

The major difference is in the increased budget for the health care system, especially after 2005, and in the increased transparency of the system, which led to constant media coverage of the dissatisfaction of patients, health providers, managers and politicians. Added to this, is the persistent perception among the population that the health care system is one of the most corrupt parts of Romanian society (Transparency International, 2006), which can only increase general discontent.

Some new organizations, such as health insurance funds, with important roles in the health system, were able to adapt to the reforms, while others, such

as DPHAs, are still unclear about their roles. The Ministry of Public Health is struggling to strengthen its stewardship role. In this context, coordination and establishment of clear roles for the main participants is one of the major challenges for the Romanian health system. Health legislation is very complex and changes frequently. While the Health Insurance Law was amended several times, other regulations known as “secondary legislation” were changed even more often. Constant change complicates a coherent decision-making process and sound management of the system, both at macro and micro levels. For instance, the new legislation enacted in 2006, which was supposed to provide a holistic and coherent framework for the health care reform process, has been amended several times already, with what seems to be, in some parts, radical change, becoming another new version of the old legislation; this is occurring in a situation where hospital organization had not been challenged at all in the previous two decades.

The introduction of social insurance was seen as a solution to overcome the prior limited health care budget. Apparently it succeeded in mobilizing financial resources but it did not contribute to an acceptable balance between deliberately increasing expenditure and controlling unnecessary spending through its chosen forms of reimbursement. The challenge remains to find the appropriate mix between capitation, fee for service and activity-dependent budgets. Hospital reform in terms of hospital reorganization is still regarded as a possible tool to improve control of expenditure.

The increase in the size of the pharmaceutical market was also stimulated by the significant increase in spending in this sector. Despite the lessons learned from neighbouring countries such as Hungary, the Czech Republic and Poland, the Romanian NHIF, along with the Ministry of Public Health, were not well prepared to face the anticipated increasing cost pressure from pharmaceuticals, and no clear strategy for this sector is in place

Both the hospital and pharmaceutical sectors are perceived by the population as unresponsive to their expectations. Finally, it is important to highlight that expectations, real or induced, have to be considered in the context of the socioeconomic development level of the country and of transformation of the health system.

The last developments showed that health has finally gained a better place on the government’s priority list, mainly in terms of budgets allotted to health, as the public funds available for health have doubled in the last three years. It seems that the Romanian Government has finally understood both its stewardship role for the health system and its responsibility for increasing access of Romanian citizens to health services and, therefore, is devoting more resources to the health sector. Furthermore, owing to the EU accession process, Romania has

succeeded in harmonizing legislation with EU requirements. However, there is still a gap between the legal developments and the actual implementation on the ground, mainly because of poor administrative capacity, lack of accountability mechanisms at the local level, inadequate communication between public institutions, insufficient management skills among elected local officials and administrative personnel, and lack of a clear vision of health system reform. And, as Lewis Carroll said, “when you don’t know where you are going, any road will get you there”.

However, the doubling of public funds available for health in just two years, coupled with the declared intention to further improve the legislative and administrative framework, are to be regarded as positive developments, showing greater commitment at the political level towards the health of the population.

10 Appendices

10.1 References

Anti-Poverty and Social Inclusion Commission (CASPIIS). *National anti-poverty and social inclusion plan*. Bucharest, Anti-Poverty and Social Inclusion Commission, 2001 (<http://www.caspis.ro/pagini/en/prezentare.php>).

Bara AC, Heuvel WJA van den. Patient status in Romanian health care system. *European Journal of Public Health*, 2003, Supplement 13:98.

Belli P. *Formal and informal household spending on health: a multi-country study in central and eastern Europe*. Cambridge, MA, Harvard School of Public Health, 2003.

Cace S, Vladescu C, *The health status of Roma population and their access to health care services*. Bucharest, Expert Publishing House, 2004.

CEEN. *Assessment of the health status of Roma and the related health care needs - RO-2004/016-772.05.01.02*. Vienna, CEEN Economic Project and Policy consulting Agency, 2006.

Central Directory of Statistics. *Demografia în Republica Socialistă România, date statistice [Demographic statistics for the Democratic Republic of Romania]*. Bucharest, Central Directory of Statistics, 1969.

Centre for Health Policies and Services. *Sondaj de opinie privind serviciile de sanatate realizat in randul medicilor din Romania [Opinion poll on health care services among physicians from Romania]*. Bucharest, Centre for Health Policies and Services 2000 (<http://www.cpss.ro>).

Centre for Health Policies and Services. *Carta asiguratului in sistemul asigurarilor sociale de sanatate [The insured chart]*. Bucharest, Centre for Health Policies and Services, 2002 (<http://www.cpss.ro>).

Centre for Health Policies and Services. *Sondaj de opinie privind serviciile de sanatate realizat in randul medicilor din Romania* [Opinion poll on health care services among physicians from Romania]. Bucharest, Centre for Health Policies and Services 2003 (<http://www.cpss.ro>).

Centre for Health Policies and Services. *Sondaj de opinie privind serviciile de sanatate realizat in randul medicilor din Romania* [Opinion poll on health care services among physicians from Romania]. Bucharest, Centre for Health Policies and Services 2005 (<http://www.cpss.ro>).

Centre for Health Policies and Services. *Barometru de opinie privind serviciile de sanatate realizat in randul populatiei din Romania* [Opinion barometer on health care services among the population of Romania]. Bucharest, Centre for Health Policies and Services 2006 (<http://www.cpss.ro>).

Centre for Health Policies and Services. *Barometru de opinie privind serviciile de sanatate realizat in randul populatiei din Romania* [Opinion barometer on health care services among the population of Romania]. Bucharest, Centre for Health Policies and Services 2007 (<http://www.cpss.ro>).

Commission of the European Communities. *Commission staff working document 596: Romania May 2006 monitoring report*. Brussels, European Commission, 2006 (http://ec.europa.eu/enlargement/pdf/key_documents/2006/monitoring_report_ro_en.pdf).

Csiki IE, Marcu A, Galan A. Healthy life expectancy (HALE) in Romania: 2002. *XXXIX Annual Conference of the Institute of Public Health*. Bucharest, June 2004.

Csiki IE, Marcu A, Ungurean C. *Description of the national health information system in Romania, results from a participative evaluation conducted in June 2003*. Bucharest, Institute of Public Health and WHO Regional Office for Europe, 2004 (<http://www.ispb.ro>).

Enăchescu D, Ionescu G, Dragu I, Teșliuc C. Financing and health care provision in Romania. In Kyriopoulos JE, Levett J, eds, *Financing and delivering health care in Balkan Region*. Athens, Association of Schools of Public Health in European Region, Athens School of Public Health, 1992.

Eurostat. *Main economic indicators*. Brussels, Statistics Office of the European Community, 2008 (<http://epp.eurostat.ec.europa.eu>, accessed April 2008).

Frenk J. The new public health. *Annual Review of Public Health*, 1993, 14:469-490.

Galan A, Scîntee SG, Stevens R *Romania Health Profile*. London, DFID's Health Systems Resource Centre for the UK Department for International Development, 2003.

General Assembly Resolution 46/119 on the protection of persons with mental illness and the improvement of mental health care. New York, United Nations, 1991.

Government of Romania. *Cartea alba a guvernării PSD, programul de guvernare 2000–2004* [Governing programme 2000–2004]. Bucharest, Government of Romania, 2000 (<http://www.gov.ro>).

Government of Romania. *Cartea alba a guvernării PSD, programul de guvernare 2005–2008* [Governing programme 2005–2008], Ch. 8: *Health policy*. Bucharest, Government of Romania, 2004:34–39 (<http://www.gov.ro/obiective/program-de-guvernare.pdf> http://www.healthsystemsrc.org/publications/Country_health/europe/Romania.pdf).

GVG Consultancy. *Planning and regulatory framework for Romania's health services, a review of Romania's national hospital rationalisation strategy*. Brussels, GVG Consultancy February 2004.

Hunt P (Special Rapporteur). *The right of everyone to the enjoyment of the highest attainable standard of physical and mental health, mission to Romania*. New York, ECOSOC Commission on Human Rights, February 2005.

Institute of Hygiene, Public health, Health Services and Management. *Ancheta de opinie asupra reformei sistemului de îngrijiri de asistentă medicală primară, în rândul medicilor de familie și a pacienților din 8 județe pilot* [unpublished report]. Bucharest, Institute of Hygiene, Public health, Health Services and Management, 1995.

Institute of Public Health Bucharest, 1999 (<http://www.ispb.ro/>).

Interhealth Institute. *Romania health sector reform: final report and addendum to the final report* [Report submitted to the World Bank, Washington, DC, 1998].

Jenkins S, James J, Waddington C. *Evaluation of the health reform in eight pilot districts in Romania*. London, Institute for Health Sector Development, 1995.

Johnston T. *Supporting a healthy transition. Lessons from early World Bank experience in eastern Europe*. Washington DC, World Bank Operations Evaluation Department, 2002 (http://www.worldbank.org/oed/transitions/economies/docs/eca_health_wp.pdf).

Marcu A, Vitcu L, Galan A, Rădulescu S. Anii de viață potențiali ajustați pentru incapacitate (DALY): criteriu de identificare a problemelor de sănătate la nivel de județ. *Management în sănătate*, 2000, 3:21–25.

Marcu A, Butu C. *Household survey 1997*. Bucharest, Bucharest Institute of Public Health, 1997.

Millard F. Social policy in Poland. In Deacon B, ed., *The new eastern Europe: social policy past, present and future*, London, Sage, 1992.

Ministry of Economy and Finance 2007 (<http://www.mfinate.ro>, accessed December 2007).

Ministry of Education and Research. *Raport annual 2003 asupra politicilor guvernamentale in domeniul cercetare-dezvoltare si inovare* [Annual activity report]. Bucharest, National Authority for Scientific Research, Ministry of Education and Research, 2003 (http://www.mct.ro/ancs_web/index.php?action=viewart&artid=1287&idcat=499).

Ministry of Education and Research. *Raport anual de activitate perioada acoperită 2005–2006* [Annual activity report for period 2005–2006]. Bucharest, National Authority for Scientific Research, Ministry of Education and Research, 2006 (http://www.mct.ro/ancs_web/index.php?action=viewart&artid=1287&idcat=499).

Ministerul Educației și Cercetării, Autoritatea Națională pentru Cercetare Științifică (Ministry of Education and Research, National Authority for Scientific Research) Raport anual de activitate (Annual activity report) Perioada acoperită: 2005–2006 (covered period 2005–2006)

Ministry of Environment and Water Resources Management. *Raport privind starea mediului în România în anul 2002*. Bucharest, Ministry of Environment and Water Resources Management, 2002 (<http://www.mappm.ro>).

Ministry of Public Health. OMS nr. 141/03/2002 privind reorganizarea rețelei naționale de supraveghere și control al bolilor transmisibile [Order of the Minister of Public Health no. 141 from 07/03/2002 regarding the reorganization of the national network for surveillance and control of the communicable diseases, the communicable diseases surveillance system]. *Monitorul Oficial* [Official Gazette] 181/18.03.2002.

Ministry of Public Health. *National strategy for the prevention and control of sexually transmitted infections*. Bucharest, Ministry of Public Health, 2003.

Ministry of Public Health. *Activity Report on 2003*. Bucharest, Ministry of Public Health, 2004a (http://www.ms.ro/g_ms/ms.asp).

Ministry of Public Health. *National public health strategy of Romania*. Suceava, Hervis Publishing House, 2004b.

Ministry of Public Health. *Statistical data*. Bucharest, Ministry of Public Health Computing Centre of Health Statistics and Medical Documentation, 2006a.

Ministry of Public Health. *Ministerial Order 86/2006*. Bucharest, Ministry of Public Health, 2006b (<http://www.ms.ro>).

Ministry of Public Health. *Health status of population 1990–2006*. Bucharest, Ministry of Public Health Centre for Health Statistics, 2007a.

Ministry of Public Health. *Hospitals and beds in 2006*. Bucharest, Ministry of Public Health, Centre for Health Statistics, 2007b.

Ministry of Public Health and Family. *Romanian health status survey*. Bucharest, Computing Centre for Health Statistics and Medical Documentation, 1997.

Ministry of Public Health and National Commission for HIV/AIDS (2005) *Statistical data for HIV/AIDS in Romania at 30 June 2005*. Bucharest, Ministry of Public Health, 2005 (<http://www.cnlas.ro>).

Ministry of Public Health and WHO Regional Office for Europe. *Assessment of the national communicable disease surveillance system*. Bucharest, Ministry of Public Health November 2001.

Moga C, Corabian P, Harstall C et al. Developing health technology assessment in Romania, *Euro Health*, 2003, 9:30–34.

Murray C, Xu K, Klavus J et al. Assessing the distribution of household financial contributions to the health system: concepts and empirical application. In Murray C, Evans D, eds *Health systems performance assessment: debates, methods and empiricism*, Geneva, World Health Organization, 2003:513–523.

National Bank of Romania (<http://www.bnr.ro>, accessed January 2008).

National Centre of Communicable Diseases Prevention and Control. *Communicable diseases surveillance and control, 2006*. Bucharest, National Centre of Communicable Diseases Prevention and Control, Bucharest Institute of Public Health, 2006.

National Commission for Economic Forecasting, Bucharest (<http://www.cnp.ro>).

National Health Insurance Fund. *Report 2004*. Bucharest, National Health Insurance Fund, 2004 (<http://www.casan.ro>).

National Institute for Statistics. *Statistica socială: culegere de date*. Bucharest, National Institute for Statistics, 1995:52.

National Institute for Statistics. *Census 2002*. Bucharest, National Institute for Statistics, 2002.

National Institute for Statistics. *Anuarul statistic al României [Yearbook]*. Bucharest, National Institute for Statistics, 2004 (<http://www.insse.ro/>).

National Institute for Statistics. *Anuarul statistic al României [Yearbook]*. Bucharest, National Institute for Statistics, 2005 (<http://www.insse.ro/>).

National Institute for Statistics. *Anuarul statistic al României [Yearbook]*. Bucharest, National Institute for Statistics, 2006 (<http://www.insse.ro/>).

National Institute for Statistics. *Anuarul statistic al României [Yearbook]*. Bucharest, National Institute for Statistics, 2007 (<http://www.insse.ro/>)

Newey C, Nolte E, McKee M, Mossialos E. *Avoidable mortality in the enlarged European Union*. Paris, Institut des Sciences de la Santé, 2003.

Rughinis C. *Platile informale si perceptia coruptiei în sistemul medical din România*. Bucharest, Open Society Foundation, 2004 (http://www.osf.ro/ro/program_articol.php?articol=18).

Shakarishvili G. *Decentralisation in healthcare, analyses and experiences in central and eastern Europe in the 1990s*. Budapest, Open Society Institute, 2005.

Strategy and Synthesis Directorate. *Buletin Statistic Trimestrial în Domeniul Muncii, Solidarităţii s Sociale și Familiei [Quarterly Statistical Bulletin on Labour, Social Security and Family]*. Bucharest, Strategy and Synthesis Directorate, 2006, No. 1(53)/2006 (<http://www.mmssf.ro/website/en/statistici/asistenta53.pdf>).

Transparency International. *Global corruption report: corruption and health*. Berlin, Transparency International, 2006.

Tyczynski JE, Bray F, Aareleid T et al. Lung cancer mortality patterns in selected central, eastern and southern European countries. *International Journal of Cancer*, 2004, 109:598–610.

United Nations. *Human development report. millennium development goals: a compact among nations to end human poverty*. New York, United Nations, 2003.

United Nations. *Human development report. Beyond scarcity: power, poverty and the global water crisis*. New York, United Nations, 2006.

United Nations General Assembly Resolution 46/119 on the protection of persons with mental illness and the improvement of mental health care. New York, United Nations, 1991 (<http://www.un.org/documents/ga/res/46/a46r119.htm>).

United Nations System in Romania. *Common country assessment, Romania*. Bucharest, United Nations System in Romania, 2003 (http://www.undp.ro/country_framework/CCA%20Romania.pdf).

UNAIDS. *Romania country assessments*. Geneva, UNAIDS, 2007 (http://www.unaids.org/en/Regions_Countries/Countries/romania.asp, accessed April 2007).

UNDP. *Reproductive health survey, Romania 1993*. Bucharest, United Nations Development Programme/Romania Country Office, 1993.

UNDP. *Country programme summary sheet: social assessment of Roma and HIV/AIDS in Central East Europe, 2003–2004*. Bucharest, United Nations Development Programme/Romania Country Office, 2004 (<http://www.undp.ro/publications/pdf/Roma%20Report.pdf>).

UNDP. *National human development report for Romania 2003–2005*. Bucharest, United Nations Development Programme/Romania Country Office, 2005.

UNDP and Romanian Academic Society. *Annual early warning report: Romania after 2000, threats and challenges*. Bucharest, United Nations Development Programme/Romania Country Office, 2001.

UNICEF. *Common country assessment 2003: nutritional status of children under 5*. Bucharest, UN System in Romania, 2005.

Universal Declaration of Human Rights. New York, United Nations, 1948 (<http://www.un.org/Overview/rights.html>).

Vladescu C, Radulescu S, Cace S. The Romanian health care system: between Bismark and Semashko. In Shakarishvili, G, ed. *Decentralization in healthcare. Analyses and experiences in central and eastern Europe in the 1990s*. Budapest Open Society Institute, 2005, (http://lgi.osi.hu/publications/2005/274/Health_Romania.pdf, accessed September 2005).

Vladescu C, Radulescu S. Improving primary health care: output-based contracting in Romania. In Brook PJ, Smith SM, eds. *Contracting for public services: output-based aid and its applications*. Washington, DC, World Bank and International Finance Corporation, 2001.

Vladescu C. More money for less satisfaction in Romanian's health insurance system. *International conference on advancing economic growth: investing in health*. London, Chatham House, 2005.

Vladescu C. *Modificari legislative propuse in vederea eficientizarii sistemului de asigurari sociale de sanatate, Prezentare publica a formei finale a pachetului legislative privind reforma in domeniul sanitar [Proposed legislative measure that intend to make more efficient the social insurance system, public presentation of the legislative bill regarding the reform in health care]*. Bucharest, Parliament Publication, 2006.

WHO. *Assessment of the mental health situation in Romania* [unpublished document]. Geneva, World Health Organization, 2000a.

WHO. *World health report 2000*. Geneva, World Health Organization, 2000b.

WHO. *Mental health in Europe. Country reports from the WHO European Network on Mental Health, 2001*. Geneva, World Health Organization, 2001a (<http://www.euro.who.int/document/E76230.pdf>).

WHO. *ATLAS: country profiles, 2001*. Geneva, World Health Organization, Department of Mental Health and Substance Dependence, 2001b (http://www.who.int/mental_health).

WHO. *National health accounts data*. Geneva, World Health Organization, 2002.

- WHO. *World health report 2003*. Geneva, World Health Organization, 2003.
- WHO Regional Office for Europe. *Health for All database (HFA-DB)*. Copenhagen, WHO Regional Office for Europe, 2004 (<http://www.euro.who.int/hfadb>).
- WHO Regional Office for Europe. *Health for All database (HFA-DB)*. Copenhagen, WHO Regional Office for Europe, 2007a (<http://www.euro.who.int/hfadb>, accessed November 2007).
- WHO Regional Office for Europe. *European Environment and Health Information System Factsheet 11: outbreaks of waterborne diseases*. Copenhagen, WHO Regional Office for Europe, 2007b (http://www.euro.who.int/Document/EHI/ENHIS_Factsheet_1_1.pdf).
- World Bank. *World development report: from plan to market*. Washington, DC, World Bank, 1996.
- World Bank. *Romanian health sector reform: final report*. Washington, DC, World Bank, 1998.
- World Bank. Report 24756: *Building institutions for public expenditure management: reforms, efficiency, and equity*, Ch. 5: *Improving resource allocation in the health sector*. Washington, DC, World Bank, 2002 (<http://www.countryanalyticwork.net/CAW/Cawdoclib.nsf/vewEurope/F3165933881CF7DC85256C7D00540E3A?editDocument>).
- World Bank. *Report No. 26169-RO, Poverty assessment*, Vol. 1: *Main report*. Washington, DC, World Bank Human Development Sector Unit, Environmentally and Socially Sustainable Development Unit, Europe and Central Asia Region, 2003 ([http://lnweb18.worldbank.org/ECA/ECSSD.nsf/Attached/Romania%20Poverty%20Assessment/\\$FILE/PovertyAssessment_Eng.pdf](http://lnweb18.worldbank.org/ECA/ECSSD.nsf/Attached/Romania%20Poverty%20Assessment/$FILE/PovertyAssessment_Eng.pdf)).
- World Bank. *Romania second health sector reform project*. Washington, DC, World Bank, 2004 (<http://www.worldbank.org>).
- World Bank. *World Development Indicators 2006*. Washington, DC, World Bank, 2006 (<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS>, accessed July 2007).
- Zamfir C, Preda M (eds.). *Romii in Romania [Roma in Romania]*. Andover, MN, Expert Publishing, 2000.

10.2 Useful web sites

Ministry of Public Health: <http://www.ms.ro>

National Drug Agency: <http://www.anm.ro>

National Health Insurance Fund: <http://www.cnas.ro>

National Authority for Research: <http://www.mct.ro>

National Institute for Statistics: <http://www.insse.ro>

National Bank of Romania: <http://www.bnr.ro>

National Trade Union (BNS): <http://www.bns.ro>

Romanian College of Physicians: <http://www.cmr.ro>

National School of Public Health and Health Management:
<http://www.snsps.ro>

Institute of Public Health Bucharest: <http://www.ispb.ro>

Centre for disease control and prevention: <http://www.cpcbt.ispb.ro>

Institute of Public Health Cluj: <http://www.ispcj.ro>

Institute of Public Health Iasi: <http://www.pub-health-iasi.ro>

Centre for Health Policies and Services: <http://www.cpss.ro>

Ministry of Foreign Affairs: <http://www.mae.ro>

Ministry of Economy and Finance: <http://www.mfinante.ro>

Romanian Government: <http://www.guv.ro>

10.3 Principal legislation

Law 95/2006. Law on Health care reform. It has 17 titles covering almost all fields in the health sector. The law included and adapted all previous legislation with the aim to include the acquis communautaire as well as to accelerate the health care reform

Government Decision 364/2007 on the contracting framework for medical services delivery within the health insurance scheme

Law 46/2003 on patients' rights

Order of the Minister of Public Health 386/2004 on norms for the implementation of patients' right law

Law 400/2006 regulating the setting and functioning of the ambulatory medical offices (outpatient)

President of National Health Insurance House Order 328/2006 regulating monitoring and control activities within the health insurance system

Law 296/2002 regarding health care services for foreign citizens in Romania in accordance to international and bilateral conventions and protocols

Law 17/2000 on institutional care, regulating the social care for elderly persons

Law 416/2001 regarding the minimum guaranteed income (entered into force on 1 January 2002)

Law 705/2001 regarding the national system of social assistance (entered into force on 1 January 2002)

Law 116/2002 regarding prevention and combating of social marginalization

Law 584/2002 regarding prevention of HIV/AIDS spreading in Romania and social protection of person living with AIDS

10.4 About the authors

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Dr Scîntee has worked as a short-term expert for other national and international organizations (including the Romanian College of Physicians, district health authorities, hospitals, NGOs, WHO, the World Bank, HLSP Consulting in the UK, EuroHealth Group Consultants in Denmark) and participated in numerous projects on health policy development and analysis, reforming the health care system and developing health strategies both in Romania and in other transition countries. Dr Scîntee has also over 10 years of teaching experience at undergraduate and postgraduate levels, and she has been actively engaged in European scientific networks on public health and health policy development.

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Among his WHO-based activities, Dr Victor Olsavszky has been involved in the organization and development of workshops dedicated to those working in social and health areas. Dr Olsavszky also has teaching experience at postgraduate level in a range of topics, including some aspects of human rights problems related to social protection and health insurance activities. He has gained work experience in many different countries, including Brazil, Belarus, Ukraine, Moldavia, Turkey and Azerbaijan. His main interests lie in public health politics.

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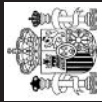
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