

Health Care Systems in Transition

Romania

















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

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

Keywords

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Foreword

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

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

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

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

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

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

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

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

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

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

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Introduction and historical background

Introductory overview

Republic of Yugoslavia to the west and Bulgaria to the south (Fig. 1). In the 1992 census, there were 22.81 million inhabitants, of whom 54.3% lived in urban areas. The capital Bucharest is the largest city, with a population of 2.34 million in 1992. The ethnic composition was 89.5% Romanian, 7.1% Hungarian, 1.8% Gypsies and 1.65% other nationalities. The official language is Romanian, but minorities are entitled to use their native language. According to the 1992 census 86.8% were Orthodox, 5.1% Roman Catholic, 3.5% Protestant, 1% Greek Catholic and 3.6% belonged to other religions.

Romania is a republic, led by a President (since 1996, Emil Constantinescu) and governed by a two-chamber parliament consisting of the Senate with 153 members, and the Chamber of Deputies with 343 members. Both are directly elected for four-year terms.

After 1989, the Romanian political system was changed, moving the country in the direction of liberal-democracy. The district (judet) is the basic administrative unit of the country. Towns and communes are smaller administrative units. There are 41 districts, with an average population of about 550 000 inhabitants (ranging from 232 951 to 874 219 in the 1992 census). Each district is divided into three to six functional areas. In each such area there is at least one hospital, one or more polyclinics and a network of dispensaries.

At the lowest administrative level are the local councils, whose mayors holds executive power. Both the local councils and the mayors are directly elected for a four-year period. Above the local council level is the district council, which coordinates the activity of the local councils. The relationship



Fig. 1. Map of Romania¹

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

between the local council and the district level is based on the principle that there should be local autonomy and that public services should be decentralized. The levels work together to address common problems and neither level is subordinate to the other. Central government is represented at local level by prefects, who are appointed by the government and whose role is to coordinate and supervise public services.

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

Since the revolution of 1989, Romania has gone through a period of rapid and major change in every sector. The processes of economic reform have been gradual rather than radical. Many major businesses remain under State control and have yet to address the fundamental issues which enable business to survive and flourish in a competitive environment. The gross domestic product (GDP) in 1999 comprised: agriculture and forestry, 14%; industry, 28%; construction, 5%; services, 43%. After a spurt of growth up to and including 1996, the GDP contracted by 6.9% in 1997, 5.4% in 1998 and 3.2% in 1999. A modest increase by 1.5% is expected for 2000 (Economist Intelligence Unit 2000). With industrial output declining, services shrinking and investment plummeting, unemployment has been rising. The trade gap has widened appreciably for a number of years until 1998, when the current account deficit stood at 7.5% of GDP in 1998. In 1999, the gap decreased to around 4% and similar figures are forecasted for 2000.

The working population dropped by over 13% between 1989 and 1995 and the number of wage earners fell by over 27%. This decline in employment was largely due to layoffs or retirements from large, state-owned textile, metal and machinery industries. Unemployment – which in 1991 was officially only 3.0% – rose to 8.8% in 1997. As a result of the closure or restructuring of major enterprises, it rose further to 12% in 1999 and 12.6% in May 2000. Female unemployment is about one sixth greater than male, and longer lasting, but short-term male unemployment is fluctuating severely.

From the 1960s to the 1990s, the health status in Romania has steadily declined in some respects. At the beginning of this period, Romania was comparable in many important respects to western European countries. Since then, a tendency of relative and absolute decline prevailed. There are important differences in health indicators between Romania and established market economies; thus, life expectancy at birth in Romania is five years lower than in western Europe, and infant mortality is almost three times higher. Communicable diseases remain common, with a rising incidence of tuberculosis (101.2 per 100 000 inhabitants in 1998 compared with 64.6 in 1990). AIDS, particularly among children, is also a significant problem which is concentrated in few districts. Ministry of Health figures from June 1998 show a total number of 5407 recorded cases, 89.5% of which are children. However, there has been a reduction in new cases in recent years, due to the improvements in blood testing and ending a number of unsafe medical practices in children's foster homes.

The percentage of the population in absolute poverty is among the highest in the European Region (World Health Report 1999). Finally, different surveys conducted in the 1990s among both physicians and the public provided evidence for the discontent surrounding the system of health care delivery.

Romania's infant mortality (20.5 per 1000 in 1998) and maternal mortality (40.5 per 100 000 in 1998) are among the highest in the European Region. Maternal mortality is six times the EU average and three times the CEE average despite a huge decline since 1990, which was the result of new national abortion policies and their implementation.

Romanian life expectancy at birth in 1997 was 69.2 years (male: 65.3, down 0.5 years compared with 1970; female: 73.4, up three years compared with 1970). The 1997 figures were the lowest in Europe outside the countries of the former Soviet Union. In 1998, life expectancy had risen to 69.9 years (male 66.3; female 73.8). Across Romania, there is as much as four years variation in average life expectancy between the extremes of Bucharest (about 1.5 years above national average) and Tulcea in the east (about 2.5 years below national average) (1990–92 data).

The standardized death rate for all ages was 1190 per 100 000 in 1998, almost 70% higher than the EU average and 10% higher than the CEE average. The reduction in life expectancy through death before the age of 65 was 9.4 years, around twice the EU figure and 20% higher than the CEE average. The main causes of death in 1998 were cardiovascular disease, cancer and respiratory disease. Cardiovascular disease and cancer account for over 50% of deaths among people aged 0–64 years, and over 85% among people aged 65 years or over. As compared with EU averages, mortality due to cardiovascular disease is far more significant in Romania, but that due to cancer far less significant. Nevertheless, rates for carcinoma of the cervix uteri are exceptionally high, and lung cancer rates have been rising sharply for many years. Deaths from chronic liver disease and cirrhosis have also been sharply rising. By contrast, recorded deaths from suicide are comparatively low.

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 sickness fund model. Workers from industrial enterprises, merchants, employers and their families as well as the self-employed were insured. However, this represented only 5% of the population. Income-related contributions were paid in equal proportions by employers and employees.

In 1949, the Law on Health Organization of the State was passed and there was a gradual transition to a Semashko health system. This was based on the principles of universal coverage and free access at the point of delivery. The main features of the Romanian health care system during these four decades

were: government financing, central planning, rigid management and a state monopoly over health services. Also notable were the absence of a private sector (as the private system was abolished) and the fact that all professionals in the health system had the status of salaried civil servants. Although there have been many changes since 1949, it was not until 1978 that a new health law was developed. In 1983, out-of-pocket payment for some services was introduced, but all services continued to be provided in state-owned facilities. The absence of competition or individual initiative, poor quality of health services, under-funding, inefficiency, inflexible norms 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 providing services to all members of society, 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 Health. The legacy of this system and the current operation of health care, to some extent, still reflect the problems of this system:

- the relatively small proportion of GDP dedicated to health care;
- the centralized and inequitable allocation of resources (with "under-thetable payments" and privileges to the nomenclature);
- the lack of response to local needs;
- the poor quality first level services, inadequate referral and the overemphasis
 on hospital-based curative services with lack of good equipment and drugs;
 the supply of beds and personnel not matched by the provision of equipment and drugs;
- growing inequity in health care provision among regions and different social groups;
- a poor managerial capacity within the health care system and the 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 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.

Starting in 1995, important laws concerning the structure and organization of the Romanian health care system were passed. Most importantly, these were Law 74/1995 concerning the organization of the College of Physicians, Law 145/1997 on Social Health Insurance, Law 100/1998 on Public Health and the Law 146/1999 on Hospital Organization. The new regulations practically changed the entire structure of the health care system and established the legal

framework for the shift from an integrated, centralized, state owned and 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 the area of pharmaceuticals, the most important new regulation is the Emergency ordinance 152/14.10.1999 regarding pharmaceutical products for human use.

Organizational structure and management

Organizational structure of the health care system

The Romanian health care system is in a transition phase from a situation in which it was almost entirely state-owned and coordinated by the Ministry of Health through 41 district health directorates and the Bucharest Health Directorate, towards a situation in which the relationships are more complex and the number of actors involved is bigger.

Since 1999, the main actors involved in the health care system are (Fig. 2):

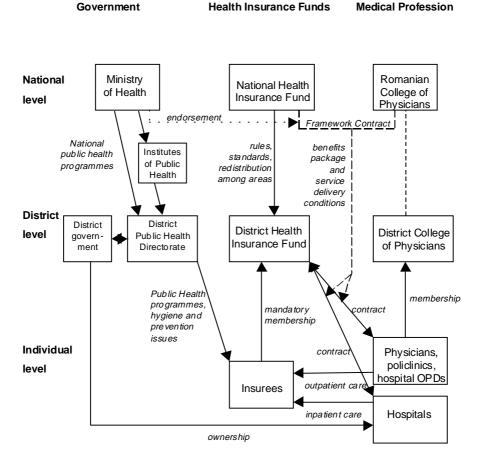
- the Ministry of Health and the district public health directorates
- the National and the district health insurance funds
- the Romanian and the district colleges of physicians
- the health care providers.

The Ministry of Health maintains the responsibility for developing national health policy and dealing with public health issues; at local level the Ministry of Health acts through district public health directorates.

The bulk of the financing of the health care system is assured by autonomous district health insurance funds (DHIFs; also referred to as "district health insurance houses") which are responsible for premium collection and provider reimbursement within their respective districts. There is a National Health Insurance Fund (NHIF; also referred to as "National Health Insurance House") that sets the rules and regulation for the DHIFs and that has the right to reallocate up to 25% of the collected funds towards under-financed districts.

The regulation of the medical profession is done mainly by the College of Physicians (CoPh). The CoPh has a national structure – the Romanian College

Fig. 2. Organizational chart of the health care system



of Physicians – and local, independent organizations at district level. Membership is mandatory for all Romanian physicians, and the boards, both at national level and at the district level, are elected every four years.

The majority of health care providers are no longer public servants and state employed, as they are paid through different contractual arrangements by the DHIFs. Since 1999, the main third party-payers are the DHIFs, which are also entitled to make contracts with private providers. This is particularly important in primary health care, where family practitioners has been assigned a new role. These doctors are no longer state employed; they are paid on a

contractual basis by the DHIFs, mainly according to the number of people registered on their lists (capitation payment).

As concerns specialist care from ambulatory facilities, the former polyclinics, these are also in a process of transformation, into independent medical facilities. The medical services are paid by the DHIFs on a contractual basis. Fee-for-service arrangements are used for ambulatory care and global budgets and salaries for hospitals.

In the inpatient sector, most hospitals are (still) under public ownership, with very few initiatives of private practice. As concerns the hospitals' budgets, these are, starting from 1999, negotiated with the DHIFs. Seventy per cent (70%) of the total budget is allotted on a historical basis and 30% on performance criteria (such as average length-of-stay, number of inpatients, etc.). 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).

Other actors involved in the health care system are:

- the Ministry of Finance, as the public body in charge with monitoring of spending of public funds, in accordance with state regulations;
- regional and local governments, represented by local councils and prefectorates;
- other ministries with competence in health matters: Ministry of Labour and Social Protection, which provides funds for health insurance contributions for people on unemployment or on social benefit; Ministry of Transport, Ministry of Defence, Ministry of Interior, Ministry of Justice, and the Romanian Intelligence Agency, which have their own health care system consisting of separate health care facilities (hospitals, polyclinics, dispensaries). There are now two countrywide health insurance funds, one related to the Ministry of Transportation and one related to all institutions of national security. These two funds have to follow the same rules and regulations as the DHIFs.

Planning, regulation and management

The Romanian health care system has recently been changed from an integrated model, in which health care providers were directly employed by the Ministry of Health, to a *contract model* in which health care providers in the curative health system are independent and are contracted by the health insurance funds. These contracts are based on the so-called framework contract.

Ministry of Health

The creation of the health insurance funds and the introduction of a new method for purchasing health care services had a substantial impact on the role of the Ministry of Health. Most dramatically, since 1 January 1999, the Ministry of Health no longer has direct control over the financing of a large part of its network of service providers. After the 1998 transitional year, the ministry has become, from a legal point of view, mainly a policy, planning and coordinating entity that will keep responsibility for:

- Managing the state's budgetary allocation for health: the Ministry of Health
 retains responsibility for national programmes addressing health promotion,
 prevention, primary health care, selected specialty services, support for
 training, national tertiary care hospitals, financing investments in buildings
 and high tech medical equipment. The Ministry of Health is under increasing
 scrutiny to justify the programmes it selects for support;
- Managing health programmes of national importance, the so-called public health programmes;
- Regulating both the public and private health sectors: a new role of the
 Ministry of Health is that of a regulator of Romania's emerging private
 health sector. Numerous doctors already operate private medical practices
 and in Bucharest and other large cities, a few multi-specialty private clinics
 have been established. The private sector can play an important role in
 supporting and supplementing services provided by the public health sector.
 The public and private health sectors can interface in several ways and the
 Ministry of Health has to regulate this aspect;
- Conducting health policy research and planning: the impact of health reform and altered financing mechanisms, the need to upgrade buildings, major repairs and only high-technology medical equipment, and the emergence of the private health sector require the Ministry of Health to play a leadership role in determining how these issues should be addressed;
- Defining and improving the legal and regulatory framework for the health care system;
- Developing a coherent human resources policy and building capacity for policy analysis and management of the health care system.

However, legal changes of roles and responsibilities have not been yet associated with significant changes in skills and competencies.

District public health directorates (DPHDs)

Up to the introduction of the social health insurance system, the basic administrative unit of health services organization was the district health

directorate at district (judet) level. Since 1999, this structure has been transformed into DPHDs. Under the authority of the respective prefect, the DPHD is the representative body of the Ministry of Health at the district level.

The DPHDs have roles and responsibilities for:

- Developing, implementing and evaluating public health programmes;
- Monitoring of health status of the population in relation with the main environmental risk factors;
- Being directly involved in public health activities;
- Communicating to public and to local authorities on environmental health matters and involving the community in the decision-making process at local level;
- Collaborating with other actors involved in health and health-related fields at the district level.

The district public health directorate is led by a council board. The director is usually a physician and is appointed by the Minister of 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 the health services at the district level.

In terms of financial resources, these DPHDs have now less than a third of the available public funds; the rest are under the management of the DHIFs.

National Health Insurance Fund (NHIF)

The NHIF is a specialized public institution that sets the rules for the functioning of the social health insurance system.

The NHIF negotiates the framework-contract with the Romanian College of Physicians which sets up the benefit package to which the insurees are entitled and the resources allotted between types of care (see separate section below). The NHIF also decides on the financial redistribution between the DHIFs.

The NHIF has the right/power to issue implementing regulations (rules, norms and standards) mandatory to all DHIFs, in order to insure coherence of the health insurance system. At the same time, the NHIF is in charge of coordination with the Ministry of Health, the College of Physicians, the Ministry of Finance and the Ministry of Labour and Social Protection on all matters related to health care.

According to the Health Insurance Law, the leadership of the NHIF was supposed to be established through national election. A government ordinance postponed the election for four years and decided that the Council of Adminis-

tration (CA) of the NHIF should consist of 15 members with the following composition:

- five representatives of the government: one appointed by the Minister of Health, one by the Minister of Labour and Social Protection, one by the Minister of Finance and two by the Romanian President;
- five representatives of trade unions;
- five representatives of employers' associations.

The President of the NHIF is appointed by the Prime Minister. The CA has two vice-presidents, elected by the members of Council of Administration.

District health insurance funds (DHIFs)

Since 1999, these new structures are in charge of raising social health insurance contributions from employers and employees working in the respective district. They are also responsible for reimbursement of local providers, both individual providers, i.e. physicians, and institutional providers, i.e. medical facilities such as hospitals and outpatient centres. They are financing mainly curative services on a contractual basis. Each DHIF is led by a council Board made up of nine members. According to the existing rules, three of them are nominated by trade unions, three by employers' associations and three by the respective district council (a body which is elected at the district level every four years). They have a president and two vice-presidents elected from the board members.

College of Physicians (CoPh)

The CoPh has organizations both at district and national level. The national and district board leaders are elected at district level every four years. The CoPh has important and extended responsibilities in all areas of concern for physicians. This involves most fields of the health care sector, including the health insurance system in which the CoPh is involved in negotiating the framework-contract that forms the basis for all individual contracts between DHIFs and providers. By virtue of this, the CoPh has an influence over the content of the benefit package for the insured population, the type of reimbursement mechanisms in place for health service providers, which drugs are compensated and in what proportion, etc. At the same time, the CoPh has important responsibilities in areas concerning training and accreditation of physicians. In order to have the right to practise, all physicians should be registered with the District College of Physicians 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.

The framework contract

The NHIF and the Romanian College of Physicians negotiate and sign each year a "framework contract" which needs endorsement by the Ministry of Health and approval through a government decision. This contract forms the basis for all contracts between DHIFs and health care providers, i.e. medical offices, dispensaries, diagnosis and treatment centres, health centres (polyclinics), hospital and their outpatient units, etc. According to the Health Insurance Law, it sets up the terms for health care services, regarding: a) the list of health care services, medicine and other services to the insured; b) service quality and effectiveness parameters; c) health care service payment criteria and procedures; d) costs, payment procedures and documents required; e) primary health care assistance; f) patient hospitalization and release; g) justification and length of hospitalization; h) supply of inpatient treatment or rehabilitation; i) overall terms for ambulatory treatment; j) prescription of drugs, health care supplies, therapy procedures, prosthesis and orthesis, walk-support and self-service devices; k) dentistry services and payment terms; l) proper notification to the sick. The framework contract as well as the norms for its enforcement are revised annually and provide the details for individual contracts with providers, specifying among others, the details of payment mechanism, as described in a further section. The contract provides indicative proportions for the allocation of funds for different types of care (i.e. primary care, hospital care, specialist ambulatory care, dental care and others).

Decentralization of the health care system

Initial elements of decentralization were introduced during the first years of the new regime. The Law of Local Public Administration, passed in 1992, set out the new structure of decentralized public administration in the country. This defined the organizational context in which the public sector health services operate. It described three forms of decentralization:

- Functional *deconcentration* within the Ministry of Health, operated through 42 district health directorates (DHDs). These were supposed to apply the guiding Ministry of Health health policies at district level. They were headed by a director (always a physician), appointed by the Ministry of Health in agreement with the prefect of that district. After the introduction of the health insurance system in 1999, DHDs changed into District Public Health Directorates (DPHDs) with a new structure.
- Prefectoral *deconcentration* exists through the central appointment of a prefect in each district. The prefects are representatives of the central

government in their district and should ensure the legal correctness of all decisions by the local authorities, and coordinate the activities of the functionally deconcentrated state services. The prefect also heads an administration council including 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 DPHD). The prefect must approve appointments made for the positions of director and deputy director of the DPHD, although the actual appointments are made by the Ministry of Health. The prefect can also issue instructions on technical aspects of the health service, although these must be signed by the director of the DPHDs.

- *Devolution* operates through a system of local government embracing the form of locally elected councils. These have a number of powers with implications for the health sector. These are:
 - to approve the organization and activities of the local civil servants, including their appointment;
 - to ensure the proper functioning of local services;
 - to evaluate health risks from living and working environment and to take intervention to reduce the effects of risk factors;
 - to prevent and limit outbreaks of infectious disease;
 - to authorize the opening and closing of local health facilities.

This structure of public sector operation maintained a relatively centralized character through the lines of central-periphery authority, financial control and central administrative regulation.

At the level of Ministry of Health structures, the aim was to strengthen the role of the DHD which was pilot-tested in four, and subsequently in eight, districts. District strategies and objectives were identified for the pilot period with emphasis on primary health care services, human resource performance and motivation, improved management and integration of hospitals, and community involvement (for more details see the section on *Health care reforms*).

Until the introduction of the social health insurance system, decentralization of health care was limited by the continuing existence of hierarchical organization and a rigid system of reporting. Until then, it had mainly taken the form of deconcentration. Responsibilities (for example, staffing policy) were passed on to the district health directorates, rather than being handed over to bodies outside of the structure. There was little devolution and even less delegation.

After the introduction of health insurance regulation, *delegation* and *privatization* play a more important role in the process of decentralization.

The health insurance funds have taken over responsibilities concerning revenue generation, allocation of resources to geographical areas, levels of care and provider institutions.

It should also be mentioned that due to the new legislation, the Ministry of Health has to delegate some of its responsibilities to the College of Physicians. These include the regulation of professional activities, planning numbers of medical staff (together with the Ministry of Health) and representation of physicians to the third-party payer.

Already in 1996, private health care enterprises employed almost 12 000 people (not counting the self-employed owners). Revenues declared by them were 999.6 billion lei or 23 % of total health expenditure (Table 1). Pharmacies formed the most important private beneficiary of the public sector receiving subsidy payments of 178.2 billion lei from the Special Health Fund.

Table 1. Private sector health care institutions in Romania, 1995/1996

Type of enterprise	Number of private enterprises, 1995	Private sector revenues (in (in million lei), 1996	Number of employees*	Revenue/ employee (in million lei)
Hospital	2	911	32	28
Medical office, dispensary or polyc	linic 2 706	16 913	656	26
Pharmacy	2 360	879 892	8 739	101
Dental office	2 422	32 422	1 568	21
Retail seller of prosthetics,				
appliances and medical devices	_	53 261	361	148
Other	_	16 250	527	31
Total	_	999 649	11 883	84

Source: National Commission for Statistics Annual Yearbook 1995 and National Commission of Statistics Enterprise Database 1996.

Notes: - Not available; * Number of employees is assumed to exclude owners.

Health care finance and expenditure

Main system of finance and coverage

Intil 1997, the main source of funding for the centralized health care system in Romania was general revenues, mainly through the state budget. Administered by the Ministry of Health and other ministries with health service provider networks, the budget was the only source of funding until 1991. In the early 1990s, the move toward diversifying the sources of funding gained support within Romania as a way of increasing public resources for the health sector. As part of this trend, the government introduced partial reimbursement of drugs prescribed in outpatient care in 1992. The move was accompanied by the establishment of the Special Health Fund, based mainly on a 2% payroll tax but also including funds from small taxes on tobacco and alcohol sales and advertising. In 1993, responsibility for funding material (other than drugs), utilities and current maintenance was transferred from the state to local budgets (see also the section on *Sources of finance*).

In 1997, the Health Insurance Law transformed the Romanian health care system from a Semashko state financed model to an insurance based system. Key provisions of the law are regulating health sector revenue generation as well as redistribution and allocation of funds.

The law made insurance membership mandatory and linked it to employment; contributions depend on income and are paid in even shares by the insured and the employer. Since then, earmarked payroll contributions are the main sources of health sector funding. The new funding system was phased in in 1998, when employers and employees each paid a 5% payroll tax and pensioners contributed 4% of their pensions. These contributions did not affect net income by much, because they were deducted after pensions and benefits increased by 4%. The 10% contribution rate of 1998 was increased to 14% since 1999 (7% from employers and 7% from employees). The self-employed, farmers, pensioners, and the unemployed pay a 7% contribution to fund health insurance.

Children and young people, the handicapped and war veterans with no income, and dependants of an insured person without their own income (wife, husband, parents and grandparents) have free access to health insurance. For conscripted soldiers and people serving prison sentences, insurance contributions are paid by the budgets of the Ministry of Defence and Ministry of Justice.

The Ministry of Finance, the Ministry of Health and district health authorities carried out the functions of insurance bodies during the transitional year 1998 (the transition period was extended until the end of March 1999 by Ordinance No. 125/98). During this period, the DHIF function of payment of providers was performed by the district health directorates, the Ministry of Health acted as the National Health Insurance Fund and the structures under the authority of the Ministry of Finance carried out the function of revenue collection. Insurance funds (National and district) were set up as independent bodies on the 1 January 1999 and took over the actual administration of funds in April 1999. Beginning in 2002, the boards of insurance funds will be elected by insured persons and by employers; until then, these boards are nominated by trade unions, employers' associations and Government (at national level) or local councils (at district level).

All the funds are collected locally by the 42 district health insurance funds (DHIFs, one each for the 41 districts plus one for Bucharest). The DHIFs contract services from public and private providers. The money is administrated by one autonomous health insurance fund in each district and by a national health insurance fund. In addition to the 42 DHIFs, there are two countrywide funds: one from the Ministry of Transportation and one from the ministries and institutions related to national security (Ministry of Interior, Ministry of Defence, Ministry of Justice, Intelligence Agencies).

Fixed percentages of the collected revenues are allocated to certain activities. According to an amendment of the law, up to 25% of funds must be set aside for redistribution among districts which is carried out by the National Health Insurance Fund. In addition, 20% of all funds in 1998, and 5% thereafter, have to be set aside as reserves. No more than 5% of funding can be spent on administrative costs.

Health care benefits and rationing

According to the Health Insurance Law, the insured are entitled to receive health services, pharmaceuticals and medical devices. Covered medical services include 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. The insured are entitled to medical services from the first day of sickness or the date of an accident, until they are fully recovered.

Which benefits are exactly covered as well as conditions for their delivery are laid out in the framework contract (see the section on *Planning*, *regulation* and *management*), i.e. not the law but the contract defines the benefits catalogue in detail.

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. The insured aged over 30 are entitled to a yearly medical check-up in order to prevent major morbidity- or mortality-causing diseases. Preventive dentistry services are refunded without restrictions for children under 16 years of age on an individual basis or for prophylactic school or kindergarten groups, and twice yearly for youngsters aged between 16 and 20. Adults are entitled to preventive dental services once a year.

To receive primary ambulatory health care services, the insured have to register with a family doctor on a free-choice basis. The insured are entitled to *specialized ambulatory medical services* recommended by the family doctor, observing the rule of free choice of the accredited specialist doctor. Ambulatory medical services include: diagnostic set-up, medical treatment, nursing, rehabilitation, drugs and health care supplies.

The insured receive health care specialized *care in accredited hospitals*, if ambulatory or home-care medical 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 are entitled to coverage of their cost of accommodation in the hospital if, according to the terms mutually agreed upon by the NHIF and the College of Physicians, the doctor requires their presence for a definite period of time.

Forty to sixty per cent of the costs of dentures and orthodontic treatments are covered by the health insurance, taking into account the rule of prophylactic

dental check-ups required by dentistry services. In accordance with the framework insurance contract, these treatments are fully covered for children aged less than 16 years of age.

The Ministry of Health, together with the NHIF and with recommendations from the College of Physicians and the College of Pharmacists, compiles a positive list for *prescription drugs* on a yearly basis with reference prices. If the generic name is on the prescription, pharmacists must sell the cheapest available drug and have to mention potential substitutes.

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. This is irrespective of the patient's contributory or non-contributory status, in terms of the framework insurance contract. This also applies to physical therapy, massage and medical gymnastics programmes.

Persons over 18 years of age have to pay for the following themselves: 1. drugs recommended for mild respiratory diseases as well as analgesic, purgative and anti-emetic drugs; 2. plastic surgery; and 3. certain devices used to correct eyesight and hearing.

While the insured are also entitled to medical *rehabilitation*, *home care* and *transportation* related to medical treatment and housekeeping support during illness or disability, details are regulated in the framework contract.

Health insurance does *not* cover health care services for professional risks, professional diseases and work accidents, selected high-technology health care services, selected dentistry services, curative health care assistance in the work-place and luxury accommodation services in hospital. All this shall be paid for directly by the patients or through other methods of payment. Legislation regarding accident insurance is under debate in the Romanian Parliament.

Sources of finance

Until 1997, tax revenues were the main source of financing of the Romanian health sector. Since 1998, these sources have been replaced to a large extent by contributions to social health insurance (see Table 2). Health expenditure from public sources varied between 2.8% and 3.9% of GDP, or US \$30–60 per capita (see also the section on *Health care expenditure*).

Recent estimates of out-of-pocket expenditure of reasonable reliability are available only from individual studies that analysed household survey data (e.g. for 1996: Marcu and Butu 1997). As different methodologies were used for these, they do not constitute a coherent time-series for out-of-pocket payments.

Table 2. Trends in health care expenditure in Romania, 1990-1999, by source of funds

Source of funds	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
State budget, in current prices										
(billions of lei)	24	62	153	365	998	1 347	2 082	4 542	3 667	3 801
Local budgets, in current prices	S									
(billions of lei)	na	na	na	101	263	393	616	1 325	69	95
Special health fund, in current prices (billions of lei)	na	na	32	126	283	414	530	1197	462	492
Health insurance, in current prices (billions of lei)	na	na	na	na	na	na	na	na	7 404	15 943
Total public expenditure, in current prices (billions of lei)	24	62	185	592	1 544	2 154	3 228	7 064	11 602	20 331
Total public expenditure, in millions of US\$	1 090	816	601	779	933	1 059	1 047	985	1 307	1 326
Public expenditure as share of GDP (%)	2.7	2.8	3.1	3.0	3.1	3.2	2.9	2.8	3.2	3.9
Private expenditure on health, in current prices (billions of lei)	7.5	16.5	_	_	_	_	1306	_	_	_
Estimation of total expenditure as share of GDP (%)	3.5	3.5	_	_	_	_	4.1	_	_	

Sources: National Commission for Statistics, Bucharest, and household survey data for private expenditure, e.g. Study of Health expenditure and use of health services by Romanian households in 1996 (Marcu and Butu 1997);

Notes: from 1995 state budget includes also external funds; na = not applicable; - = data not available.

Taxes

General, local and earmarked taxes represented the main mechanisms of revenue generation for the health sector (Table 3). The different sources of funds were tied to specific categories of expenditure. Regulations in place from 1993 to 1997 allowed state budget funds to be used for funding of staff, medical materials and capital costs, but not for utilities, non-medical materials or current repairs, which were to be covered only from local budget sources. Earmarked payroll taxes were the main source of revenue for the special health fund, used mainly for funding drugs.

Table 3. Main sources of public health financing (%), 1990-1999

Source of finance	ce 1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Taxes	100	100	100	100	100	100	100	100	36.2	21.6
general	100	100	82.7	61.7	64.6	62.5	64.5	64.3	31.6	18.7
– local	na	na	na	17.1	17.0	18.2	19.1	18.8	0.6	0.5
– earmarked	na	na	17.3	21.3	18.3	19.2	16.4	16.9	4.0	2.4
Statutory insurance	na	na	na	na	na	na	na	na	63.8	78.4

Source: National Commission for Statistics, Bucharest;

Note: na = not applicable.

Since 1998, taxes continue to be an important source for 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.

Compulsory health insurance contributions

According to the 1998 budget law, consistent also with estimates and projections in the 1998 Health Finance Study, insurance funds were expected to generate revenues of 10 296 billion lei (AHIC 1998). Following lower than expected collection figures in early 1998, the revised budget law reduced the projected revenues to 9541 billion lei. Finally, the actual 1998 health insurance revenues amounted to only 8362 billion lei, 87% of the more conservative revised projections, thus indicating lower than expected compliance. As a result, most of the reserve funds (set at 20% of revenues for 1998) were used to cover 1998 health services expenditures. These funds had been planned as start-up capital for the insurance funds in early 1999. The lower than expected revenues also raised questions about the effectiveness of the collection system.

In 1999, more cautious initial projections in the budget law (Table 4) were revised upwards, reflecting inflation trends but also higher collection rates of the contribution. The actual increase in real terms of insurance revenue was approximately 25%, lower than the 40% real terms increase projected by the 1998 Health Finance Study (AHIC 1998). The gap can partly be explained by shrinking real wages. Still, this has been a significant increase in resources

Table 4.	Revenue and expenditure of Health Insurance Funds, 1998–2000
	(in billions of lei)

	budget law	1998 revised budget		budget law	1999 revised budget		2000 budget law
Revenue	10 296	9 541	8 372	11 967	20 443	18 386	26 725
Total expenditure	7 626	7 584	7 403	11 368	16 997	15 958	23 097
- Expenditure for medical service	s 7 564	7 521	7 340	10 770	16 354	15 482	21 760
 Administration expenses 	62	63	63	598	642	476	1 336
Reserve Fund	_*	_*	_*	598	962	806	1 336
Surplus	2 669*	1 957*	969*	0	2 484	1 622	2 292

Source: Official Gazette for budget figures, National Commission for Statistics, Bucharest and National Health Insurance Fund for actual expenditure.

Note: * The 1998 budget law and its amendments did not differentiate between surplus and reserve.

available to the health sector, which has translated only somewhat in an increase of expenditure, since the HIFs were not authorized by the revised budget law to spend at the level of available resources.

Out-of-pocket payments

Private spending on health care for 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. This is higher than the average level of private expenditures in the OECD countries but lower than in countries such as Australia and the United States. 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 toward drugs (Table 5). The design of the Household Expenditure Survey did not allow for disaggregation of the largest expenditure category, "other", which most likely was used by many respondents to indicate "underthe-table" payments.

Table 5. Estimated private spending on health care goods and services, 1996

Item	billion lei	%	
Drugs	435.2	33.3	
Consultations and laboratory tests	126.4	9.7	
Dental services	70.2	5.4	
Prostheses and appliances	28.1	2.2	
Other	645.8	49.4	
Total	1 306	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.

Although more recent assessments of the amount of private expenses for health are not available, surveys in 1998 and 1999 indicated an increased use of private providers of medical services, paid out-of-pocket. According to the new health insurance legislation, formal co-payments are required for drugs but contracted providers also have the freedom to charge co-payments for some other services. This would suggest that out-of-pocket payments for health services have further increased since 1996.

Voluntary health insurance

Private medical insurance is offered by some foreign or joint companies operating in Romania for their employees. In addition, it is used in most cases by Romanian residents travelling abroad, since compulsory health insurance does not cover the cost of services for travellers outside Romania.

External sources of funding

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

To stop the deterioration of medical assistance and to start its rehabilitation under the law no. 79/1991, a loan from the World Bank was approved by the Romanian Parliament. 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 has sought to rehabilitate the primary health care services and finance the first steps of health sector reform.

In June 2000, the World Bank approved a first US \$40 million Health Sector Reform Project loan for Romania, the first part of a two-phase adaptable programme loan totalling US \$60 million that the Bank plans to provide 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 will focus on: planning and regulation of the health care delivery system; upgrade of essential services in district hospitals; primary health care development; emergency medical services; public health and disease control; and project management.

The health sector also benefited of funds from the European Union through the PHARE Programme for Health. This had originally allocated approximately 25 million ECU in 1991 for laboratory equipment for dispensaries, drug supply and training, from which only 16.5 million were used.

In 1997, three new PHARE programmes were approved for the health sector with a total amount of four million Euro, one million for institutional reform, i.e. support for the implementation of the Health Insurance Law, and 1.5 million each for drug and blood products reformand reorganization of public health administration, respectively. All these programmes will be completed in the year 2000. In addition, a Consensus programme also supported the implementation of the health insurance legislation. It was approved in 1998, with a total value of 155 000 Euro.

UNICEF was involved in four programme areas: Women and children's health; Family education; Children in especially difficult circumstances; and Planning, social policy development and advocacy.

In addition, there are bilateral agreements with different governments for specific forms of cooperation and financial aid in health. USAID, the UK-DFID, the Japanese Agency of International Cooperation and Aid and the Swiss Government are some of the most active in this area.

Significant NGO activity in many health areas, including orphanages and AIDS care, have been financed by foreign donor agencies. For example, the Soros Foundation invested more than three million US dollars in the Romanian health sector between 1996 and 2000.

Since 1991, the health sector has received credits from diverse concerns (Siemens, General Electric, Labsystem, Nucletron, etc.). These funds have been used for buying high performance technical equipment.

Health care expenditure

Decisions on resource allocations for the health sector have typically been the result of 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 of health service budget for each district. Since 1998, with the largest part of expenditure covered from insurance sources, generated through contributions set by law, the importance of annual budget decisions was expected to decrease. This has not entirely happened, because of the amendments of the insurance law that postponed elections of boards and required approval of National Health Insurance Fund budget by the parliament. In practice, the budget laws of 1999 and 2000 set the health insurance expenditure to a level of 85–90% of revenues. The resulting surplus is used in the short term to reduce the deficit of the consolidated budget of the public sector. Although the surplus is transferred to the next year's budget of the insurance funds, there is significant loss in real terms, because of the very low interest rates paid by the state treasury in a high inflation environment.

In 1996, estimated expenditure on health services (recurrent and capital, public and private) was 4534 billion lei, or 4.1% of GDP. This figure ranks Romania as a low spender compared with countries with similar per capita GDP and also compared to most other countries in central and eastern Europe, even after taking into account the differences in GDP per capita between these countries (see Fig. 3). Introduction of the health insurance scheme has increased public expenditure to 3.9% of GDP in 1999 compared to 2.9% in 1996 and it is very likely that private expenditure has also increased slightly. This suggests that, at present, Romania is spending closer to the expected levels at its GDP

level, but with a relatively large proportion of private expenditure, with unfavourable consequences for equity of access to health care.

The international comparability of the Romanian data is limited, however, as it does not include private expenditure which is not regularly collected or calculated. Due to this, total expenditure is *under*estimated (e.g. in Fig. 3 and Fig. 4) and the share of expenditure from public sources is *over*-estimated (e.g. in Fig. 5). In addition, internationally available data also give a lower public spending as some of the public funds are not accounted for in Ministry of Health Statistics (e.g. local budgets) which explains differences between data in Table 2 and Fig. 3 and Fig. 4. Even if all these factors could be accounted for, Romania would still have a percentage of GDP spent on health which is considerably lower than in all neighbouring countries (Fig. 3) and almost all countries in the European Region (Fig. 4). There has, however, been a marked increase in the public expenditure as share of GDP from 1998 to 1999, from 3.2% to 3.9%

Equity and resource allocation. As a result of input-oriented funding and the failure of decades of central planning to achieve an equitable distribution of human and physical resources, regional differences in per capita health care spending are large in Romania. In 1997, per capita health care expenditure in

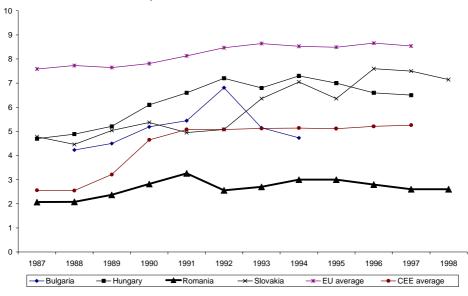
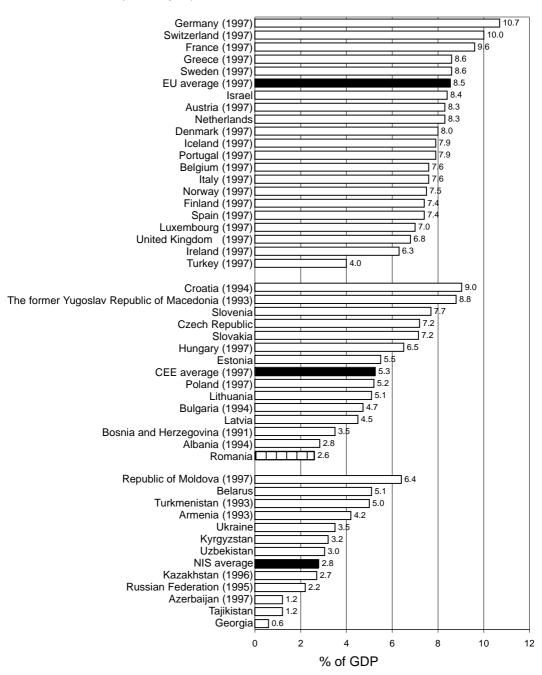


Fig. 3. Trends in health care expenditure as a share of GDP (%) in Romania and selected countries, 1987–1998

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

Fig. 4. Total expenditure on health as a % of GDP in the WHO European Region, 1998 (or latest year)



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

Percentage

100 Albania (1994) 100 Bosnia and Herzegovina (1991) 100 Bulgaria (1996) 100 Croatia (1996) T 99 Romania 98 The former Yugoslav Republic of Macedonia (1994) 97 Kyrgyzstan (1992) 97 Kazakhstan 92 Belarus (1997) 92 **Ukraine** (1995) 92 Czech Republic 92 Luxembourg (1997) Slovakia 91 90 Poland (1997) 90 Lithuania Slovenia 88 Belgium (1997) 88 87 Estonia United Kingdom (1997) 85 Denmark (1997) 85 Iceland (1997) 84 Sweden (1997) 84 83 Norway (1997) Germany (1997) 82 Ireland (1997) 77 Spain (1997) 77 Finland (1997) 76 76 France (1997) Netherlands Austria (1997) 73 Turkey (1997) Israel 73 Italy (1997) 173 Switzerland (1997) 70 Latvia 70 Hungary (1997) 69 Portugal (1997) 60 Greece (1997) 58 0 40 100 20 60 80

Fig. 5. Health expenditure from public sources as % of total health expenditure in the WHO European Region, 1998 (or latest available year)

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

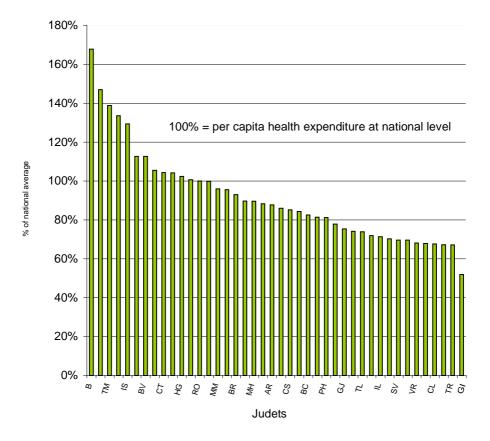


Fig. 6. Spending by districts in 1997

Bucharest was 167% of average per capita expenditure for the country as a whole, while spending in Giurgiu was just 52% of the national average (Fig. 6)

Under the 1997 law, 7% of revenues were to be redistributed among the districts in order to improve equity. This would have left the range of district health care revenues between 85% and 129% of the national average. Redistribution of about 22% of revenues would ensure that health care revenues in all districts were at least 95% of the national average. Even greater equity could be achieved by redistributing 25% of revenue, as provided under the Ordinance Number 30/98 amending the 1997 law. Until the time of writing, the 25% level of redistribution has been used, but a transparent formula for redistribution according to revenue generation capacity and health risk of the insured in different districts as well as sufficient data regarding flows of patients between districts were lacking. Therefore, the redistribution fund was used in 1999

mainly for supporting districts with difficulties in collecting the revenues, related mainly to compliance problems and not for improving equity.

Access to publicly funded health services also varies significantly with income, according to the Household Expenditure Survey, with the upper income quintile using outpatient services about 3 times and hospital services about 1.5 times more than the lowest income quintile.

Composition of health expenditures. Data describing the composition of expenditures for the entire Romanian health sector are not readily available in a consistent format. Expenditures from the largest funding bodies at a given time (Ministry of Health or health insurance funds), which account for 65–78% of all health expenditures, provide some indication of the importance of various types of expenditure in the health sector (Table 6).

Table 6. Health care expenditure by categories in Romania (as % of total public expenditure on health care), 1993–1998

Health care expenditure as share of TEHC	1993	1994	1995	1996	1997	1998	
Inpatient care (%)	58	59	59	58	63	_	
Pharmaceuticals (%)	14	18	17	19	17	20	
Investment (%)	-	4	5	5	4	5	

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

The level of expenditure on drugs is of particular interest. Despite the low absolute level of drug use in Romania, the proportion of spending allocated to drugs is still very high by OECD standards. This is in part due to the very low level of wages paid to health service professionals (and the fact that prices of drugs are largely determined in the international market). In 1996, labour-related expenditure was just under half of total health expenditure, while all other items of recurrent expenditure increased compared with the early 1990s, when labour-related expenditure amounted to more than 60% of recurrent expenditure.

Health care delivery system

Public health services

he Ministry of Health is the central authority in public health, responsible for setting organization and functioning standards for public health institutions, devolping and financing national public health programmes, data collection, empowering public health officials and drawing up reports on the population's health status. The Institute for Maternal and Child Care (IMCC) advises the Ministry 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. The National Advisory Board for Epidemiology and the National Advisory Board for Health Care Management and Public Health are created within the Ministry of Health. Their advice is taken when the Ministry of Health is faced with specific topics of strategic importance for setting public health issues.

There are four institutes of public health in the main university centres: Bucharest, Cluj, Iasi, and Timisoara. The Institute of Public Health in Bucharest (founded in 1927) has departments for environmental medicine, occupational medicine, communicable and noncommunicable disease epidemiology, social medicine, food hygiene and nutrition, children and adolescent hygiene and health promotion and education. The main tasks of the Institute are elaboration of the projects of national standards and regulations for public health, methods and methodologies for evaluation of quality of living and working environment, elaboration, coordination of implementation and evaluation of five out of 34 national public health programmes, and professional consulting. The Institute is the national focal point for several international programmes

and actions: GERMON-PMUN-AIEA for nuclear accidents, GEENET/EURO for European information network for environmental epidemiology, GEMS/AIR for air pollution, and for environmental health.

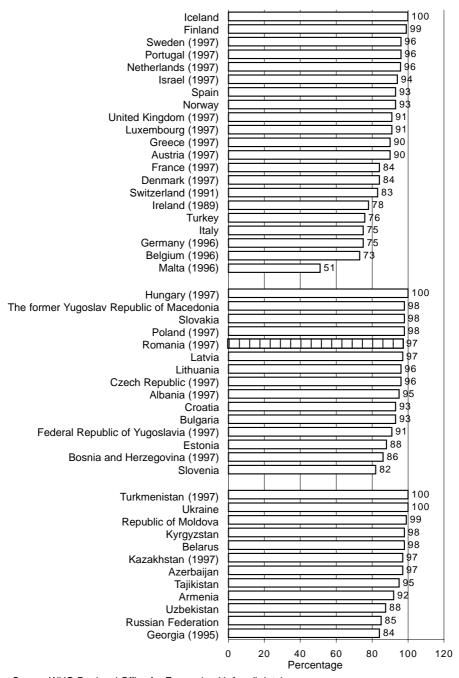
The other three institutes have similar structure and tasks. The institutes of public health are autonomous bodies accountable to the Ministry of Health and provide technical support on public health and related topics to ministries and other national institutions with health responsibilities. They also run continuing education courses and train residents in public health and related specialties. They are mainly funded by the Ministry of Health, but also have the right to attract additional funds through taxes or partnerships with different organizations.

The Institute for Health Services and Management (founded in 1991) performs research, technical assistance, continuing education and postgraduate training in health management, health policy, health promotion and health education (through the National Centre for Health Promotion and Education for Health, a department of the Institute for Health Services Management). This institution was responsible for three main components of the World Bank Health Rehabilitation Project. It cooperates with the universities of medicine and pharmacy and with other Romanian health institutions and has collaborative agreements in the training programmes with foreign universities such as the London School of Hygiene & Tropical Medicine, Montreal University (Canada), Chicago University and New York University (USA).

At the district level, the public health directorates (DPHDs) are responsible for public health issues such as: developing and implementing public health programmes, monitoring of health status of the population in relation with the main environmental risk factors; communicating to public and to local authorities on environmental health matters, sanitary inspection and preventive medicine. They have supervisory staff monitoring occupational and environmental risk factors and enforcing public health regulatory standards. Their expenses, including operating costs, salaries, materials, and medicines, are financed by the Ministry of Health; they are also allowed to raise private money, charging fees for some of their activities.

The environmental health is also the responsibility of the Ministry of Health. The Institute of Public Health Bucharest is the national coordinator for the National Environmental Health Action Plan (the Romanian NEHAP). The major objectives of the current NEHAP are institutional development and capacity building in environmental health, protection of population against specific risks from living environment, harmonization of the Romanian environmental health legislation with EU legislation, public communication on environmental health matters and involvement of the community in decision-making process at local

Fig. 7. Levels of immunization for measles in the WHO European Region, 1998 (or latest available year)



level. 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.

Communicable diseases are the responsibility of the Ministry of Health, but treatment for these diseases is covered by the health insurance funds. Most reporting of infectious diseases is done by general practitioners. Romania has established screening programmes for cervical and breast cancer for women aged 25 to 56 and over 40 years, respectively. There is also widespread radiological screening for tuberculosis. Compulsory immunization is organized by the DPHDs and mainly carried out by family doctors in the frame of the national programme. In large academic cities, vaccinology and sero-surveillance offices were created; they are associated to the institutes of public health or teaching hospitals for infectious diseases. Immunization rates in Romania have remained at acceptable levels, e.g. at 97% for measles, which is above the rates for most western European countries (Fig. 7).

Two areas that are of particular public health relevance are family planning, and health promotion and education for the health network.

Family planning

Because of a policy to increase the birth rate until 1990, there was no family planning network in Romania. There is now a Family Planning and Sexual Education unit within the Department for Maternal and Child Health of the Ministry of Health. Since 1992, eleven reference centres for reproductive health have been established. Nine of these centres are based in university clinics and two are at district level. They provide information and technical assistance, family planning, abortion, and cancer-screening services. They also train staff for 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 Health, and it was funded by the World Bank Project. A parallel network for family planning has also been created through various nongovernmental organizations. 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 of five or more children, or for women over 45 years old, is as yet unchanged.

The Health Promotion and Education for Health Network

Until 1990, health education was referred to as "sanitary education". Its organizational structure included the Laboratory for Sanitary Education of the

Institute of Hygiene and Public Health in Bucharest and at district level, the laboratories for sanitary education. Since then, great emphasis has been put on changing "sanitary education" into a network for health promotion and education. In 1992, the Laboratory of Sanitary Education was changed into a National Centre for Health Promotion and Education for Health (NCHPEH), a department of the Institute for Health Services Management. The NCHPEH coordinates national programmes of health promotion and health education. It trains staff involved in health promotion, provides technical assistance on district programmes, and studies and evaluates health promotion and health education activities. Training is provided either through courses organized in Romania or through fellowships awarded in countries with more experience in health promotion and health education.

At the district level, the laboratories for sanitary education were changed to laboratories for health promotion and health education (LHPHE), responsible to the District Inspectorate for Hygiene and Public Health (which, since 1998, is part of the DPHD). Beginning in 1992, the NCHPEH, in cooperation with foreign specialists, has coordinated training in the organization and planning of education for health campaigns, research and assessment methods in health promotion, HIV infection, sexual education and family planning. A number of national programmes have been developed to address these areas and also programmes on tuberculosis, immunization, prevention and control of cancer, cardiovascular disease and diabetes mellitus, and reduction of the infant mortality rate. Romania also participates in the European Network of Health Promoting Schools (coordinated by WHO, the Council of Europe and the European Union; nationally by the NCHPEH) 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).

Primary health care

Until 1999, primary health care was mainly performed through a countrywide network of about 6000 dispensaries. The dispensaries belonged to the Ministry of 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. Starting from 1998, patients were allowed to choose their dispensary, i.e. their family doctor. The Health Insurance Law stipulates that a family doctor may be changed after a minimum of three months after initial registration with that doctor.

According to new legislation related to the implementation of the health insurance system, general practitioners moved from being state employees to independent practitioners, contracted by the (public) health insurance funds but privately operating their medical offices.

The ministries which maintained their own health care networks also owned dispensaries, which are based in military institutions, railway stations and harbours, and provide health care services to the employees of those institutions.

Since 1990, there have also been private medical offices staffed by general practitioners or specialists. The physicians who work in these generally divide their time between the public and private sectors.

In addition to preventive and curative care, dispensaries also provide antenatal and postnatal care, some public health care, health promotion and health education activities. They also provide health certificates for marriages, for incapacity to work, and for deaths.

Primary health care reform began on a pilot basis in eight districts (out of 41) in 1994 with a new way of financing, a shift in responsibility from hospitals to the district health directorate (DHD) and the introduction of contracts between DHDs and general practitioners (as individuals or groups). The reforms assigned general practitioners a gatekeeping role and introduced competitive elements through patient choice and new forms of payment. The wage system for general practitioners was replaced with a mix of weighted capitation and fee-for-service payments. Patients were granted the right to choose their general practitioner and given the possibility of changing after three months to another general practitioner.

Access to outpatient clinic and hospital specialty services now officially requires a referral by the family practitioner, but since 1989, the referral system has increasingly been bypassed and the frequency of primary health care consultation has declined. On average, patients now consult primary health care doctors 2.3 times a year (in 1998, which is down from 2.7 in 1996), accounting for only a third of all ambulatory care contacts (cf. Fig. 8). Including specialist contacts, Romanian outpatient contact numbers are about average if compared to other European countries. During the 1990s, these have remained quite stable at around eight contacts per year.

Switzerland (1992) 11.0 76.8 Israel (1996) 16.6 Belgium (1996) 76.6 Italy (1994) 76.5 **Germany (1996)** France (1996) 76.5 76.5 Austria 16.2 Spain (1989) 6.1 EU average (1996) United Kingdom (1996) 75.9 **Denmark** (1997) 75.7 Netherlands 5.1 Iceland (1996) 74.1 Finland |3.8 Norway (1991) 73.4 Portugal 72.8 Sweden (1997) 72.0 Turkey (1997) 116.4 Slovakia 7 أ4.5 Czech Republic] 13.|7 Hungary 78.5 Bosnia and Herzegovina (1991) CEE average 7.9 Romania Slovenia 76.5 Croatia Lithuania 76.5 Estonia 76.3 Bulgaria 5.5 5.3 Poland (1997) Latvia 4.6 ∤ ٦ The former Yugoslav Republic of Macedonia 73.1 Albania (1997) 711.8 Belarus 79.1 Russian Federation 78.5 Ukraine Republic of Moldova 8.3 NIS average 8.1 Uzbekistan 7.1 Azerbaijan (1997) 6.0 Kazakhstan 5.7 Kyrgyzstan 4.9 Turkmenistan (1997) 74.6 Tajikistan 3.4 Armenia 2.4 Georgia 1.2 0 5 15 10 20 Contacts per person

Fig. 8. Outpatient contacts per person in the WHO European Region, 1998 (or latest available year)

A recent survey, requested by the Ministry of Health, showed that primary health care services in the current system are generally of poor quality (InterHealth Institute, 1998). Very few dispensaries provided emergency care

Table 7. Outpatient-based care providers data, 1997

Parameter	Rural dispen- saries	Urban dispen- saries	Emergency health centres	Polyclinics (Ministry of Health)	Polyclinics (other ministries)	Total
% Emergency visits	12.33	12.02	30.56	10.43	12.30	11.02
Visits/physicians	3 281	5 699	1 320	2 961	4 742	3 193
Visits/staff	1 018	2 163	181	1 088	1 590	1 108

Source: Interhealth 1998.

access on a 24-hour basis. Diagnostic and treatment equipment was practically non-existent, except for dental care in the bigger dispensaries. Primary carebased service had been "the neglected service" for a long time and will require continued reform attention.

Ambulatory secondary care

Ambulatory secondary health care is delivered by the network of hospital outpatients departments, centres for diagnosis and treatment and office-based specialists.

Previously, the "typical" secondary care providers were polyclinics which were located in urban areas only (while the dispensaries in both rural and urban areas catered only to primary health care). The majority of polyclinics delivered free services, but a small number charged out-of-pocket payments. State outpatient medical services were delivered by doctors on a salaried basis. Except for emergencies, medical services were delivered to a territorially defined population until 1998.

Polyclinics have now either become hospital OPDs or free standing centres for diagnosis and treatment – or have been split up into individual specialists' medical offices. Individual medical offices of specialists are starting to be set up also in rural areas, but generally they are also in towns. There have been private medical offices since 1990, usually staffed by doctors who also work in the public sector. Recent studies estimate that 15% of the physicians work both in public and in private practice (Centre for Health Policies and Services, 1999). Physicians working in private medical offices need a free practice license and an authorization for the medical unit. Private outpatient services may be

accredited for all specialties including outpatient surgery. Patients now have the free choice of selecting a specialist.

The same survey mentioned before produced a series of data about ambulatory care that are summarized in Table 7.

It should be noted that:

- the highest workloads per physician and staff were registered at urban dispensaries, followed by non-Ministry of Health providers; emergency health centres had the lowest workloads, while rural dispensaries and Ministry of Health polyclinics were around average;
- the general workload per physician does not seem to be distributed evenly
 over all system components, and the total average number of patients per
 physician did not exceed 14 per working day (and less than five patients per
 day for total staff).

Inpatient care

There are four main categories of hospitals in Romania: *Rural hospitals*, which have a minimum of 120 beds and provide internal medicine and paediatric services. *Town and municipal hospitals*, with at least 250 and 400 beds, respectively, and departments of internal medicine, surgery, gynaecology-obstetrics and paediatrics. *District hospitals* in larger towns have, in addition, departments for orthopaedics, intensive care, ophthalmology and otorhinolaryngology. Tertiary care is provided in *specialized units* such as the Institute for Maternal and Child Care, the Institute of Oncology, the Neurosurgery Hospital, the Institute of Balneophysiotherapy and Recovery, the Institute of Pneumophysiology and a number of cardiovascular and other surgery departments in teaching hospitals.

In terms of ownership, except for few small hospitals, all hospitals are publicly owned and are under state administration. They are led by a council board and a general director who holds executive power. This appointment is made by the relevant district public health directorate and is usually held by a physician. There are two deputy directors, a physician and an economist. The council board is appointed by the general director and usually includes representatives of the different departments within the hospital: health care, nursing, pharmacy, administration and accounts.

Hospitals are accredited by the Ministry of Health and, for training activities, by mixed commissions including representatives of the Ministry of Education. Accreditation specifies hospital tasks and responsibilities. Hospital mainte-

1990	1991	1992	1993	1994	1995	1996	1997	1998
207 001	206 869	179 161	179 082	174 900	173 311	170 954	166 411	164 526
8.9 4 671	8.9 4 413	7.9 4 598	7.9 4 632	7.7 4 795	7.6 4 665	7.6 4 864	7.4 4 718	7.3 4 578
	207 001	207 001 206 869 8.9 8.9	207 001 206 869 179 161 8.9 8.9 7.9	207 001 206 869 179 161 179 082 8.9 8.9 7.9 7.9	207 001 206 869 179 161 179 082 174 900 8.9 8.9 7.9 7.9 7.7	207 001 206 869 179 161 179 082 174 900 173 311 8.9 8.9 7.9 7.9 7.7 7.6	207 001 206 869 179 161 179 082 174 900 173 311 170 954 8.9 8.9 7.9 7.9 7.7 7.6 7.6	207 001 206 869 179 161 179 082 174 900 173 311 170 954 166 411 8.9 8.9 7.9 7.9 7.7 7.6 7.6 7.4

20.4

11.6

78.5

21.1

10.3

79.2

20.6

10.9

77.5

21.5

10.4

78.0

20.9

10.1

78.7

20.3

10.0

78.2

20.2

11.7

78.4

Table 8. Inpatient structure, utilization and performance, 1990-1998

19.0

11.7

66.4

Source: Ministry of Health, 1999.

Average length of stay in days 11.4

per 100 population

Occupancy rate (%)

Table 9. Data on hospital-based care providers, 1998

67.7

Parameter	Acute care hospitals	University hospitals	Chronic care hospitals	Non Ministry of Health hospitals	Total
Admissions/bed	28.86	31.79	5.85	21.35	28.97
Admissions (per 1000 pop.)	103.4	100.8	1.7	5.7	211.5
Visits (per 1000 pop.)	292.3	268.3	-	63.4	624.5
Visits/admission	2.83	2.66	-	11.20	2.95
Average length of stay (days)	9.66	9.03	47.00	12.26	9.72
Average occupancy rate (%)	76.39	77.19	75.28	71.70	76.39
% Emergency visits	33.7	49.66	-	2.13	37.35
% Emergency admissions	92.47	51.73	3.70	16.43	70.32
Beds (per 1000 pop.)	3.84	3.35	0.55	0.31	8.05
Physicians/bed	0.09	0.19	0.02	0.12	0.13
Staff/bed	0.92	1.12	0.50	0.94	0.98

Source: Interhealth, 1998.

nance, treatments and staff salaries are financed from the health insurance funds; the initial capital investment is currently financed from the state, i.e. Ministry of Health, budget.

Including short-term acute care and long-term care beds, Romania has over 164 000 hospital beds, or 7.3 beds per 1000 people. Regional variations do exist, ranging from 10.5 beds in the west and in Bucharest to 6.9 in the south. The ratio of 7.3/1000 for all bed types is below that observed in developed countries where the number of long-term care beds is high, reflecting different socioeconomic conditions. The number of acute care beds in a country is more closely related to medical needs and fluctuates less with the level of socioeconomic development. Ministry of Health statistics list 144 626 medical specialty beds. Excluding beds for psychiatry and tuberculosis, the estimate

Table 10. Inpatient utilization and performance in acute hospitals in the WHO European Region, 1998 or latest available year

Region, 1998 or latest availab	le year			
Country Hos	spital bed	s Admissions	s Average	Occupancy
p	er 1000	per 100	length of stay	rate (%)
po	opulation	population	in days	
Western Europe				
Austria	6.4^{a}	24.7ª	7.1 ^a	74.0 ^a
Belgium	5.2 ^b	18.0 ^b	7.5 ^b	80.6^{c}
Denmark	3.6^{b}	18.8^{b}	5.6^{b}	81.0 ^b
Finland	2.4	20.5	4.7	74.0^{c}
France	4.3 ^a	20.3^{c}	6.0^{b}	75.7 ^a
Germany	7.1 ^a	19.6ª	11.0 ^a	76.6 ^a
Greece	3.9^{f}	_	_	_
Iceland	3.8^{c}	18.1 ^c	6.8^{c}	_
Ireland	3.4^{a}	14.9^{b}	6.7^{b}	82.3 ^b
Israel	2.3	18.4	4.2	94.0
Italy	4.6 ^a	16.5 ^a	7.0 ^a	76.0 ^a
Luxembourg	5.6^{a}	18.4 ^d	9.8^{b}	74.3 ^d
Malta	3.9^{a}	_	4.5	72.2ª
Netherlands	3.4	9.2	8.3	61.3
Norway	3.3	14.7 ^b	6.5^{b}	81.1 ^b
Portugal	3.1	11.9	7.3	75.5
Spain	3.1°	10.7 ^c	8.5^{b}	76.4 ^c
Sweden	2.7^{a}	16.0 ^b	5.1 ^b	77.5 ^b
Switzerland	5.2 ^b	14.2 ^e	11.0 ^a	84.0 ^a
Turkey	1.8	7.1	5.5	57.3
United Kingdom	2.0^{b}	21.4 ^b	4.8^{b}	_
CCEE				
Albania	2.8 ^a	_	_	_
Bosnia and Herzegovina	3.4^{g}	7.4^{g}	9.7^{g}	70.9^{g}
Bulgaria	7.6^{b}	14.8 ^b	10.7 ^b	64.1 ^b
Croatia	4.0	13.4	9.6	88.2
Czech Republic	6.5	18.4	8.8	70.8
Estonia	6.0	17.9	8.8	74.6
Hungary	5.8	21.7	8.5	75.8
Latvia	_	_	_	_
Lithuania	_	_	_	_
Poland	-	_	_	_
Romania	-	_	_	-
Slovakia	7.1	19.3	10.3	77.9
Slovenia	4.6	15.9	7.9	75.4
The former Yugoslav Republic of Macedonia	3.5^{a}	8.1	8.9	66.5
NIS				
Armenia	6.0	6.0	10.7	30.2
Azerbaijan	8.0	5.6	_	_
Belarus	-	_	-	88.7 ^d
Georgia	4.6 ^b	4.8 ^b	8.3^{b}	26.8 ^d
Kazakhstan	6.6	14.9	13.0	91.2
Kyrgyzstan	6.7	15.8	12.9	81.7
Republic of Moldova	9.1	16.9	15.4	77.6
Russian Federation	9.0	19.9	14.0	82.5
Tajikistan	6.2	9.7	13.0	59.9^{b}
Turkmenistan	6.0^{a}	12.4ª	11.1ª	72.1 ^a
Ukraine	7.4	17.9	13.4	88.1
Uzbekistan	_	_	_	_

Source: WHO Regional Office for Europe health for all database. Note: * 1997, * 1996, * 1995, * 1994, * 1993, * 1992, * 1991, * 1990.

for acute care specialty beds is about 5.2 beds per 1000 population, still regarded by the ministry as a high ratio (Ministry of Health, 1998). According to the InterHealth Institute Report to the World Bank (1998), hospital planning criteria twenty years ago aimed for 4.0 acute care beds per 1000 people. InterHealth concluded that improvements in biomedical technology, surgical techniques and anaesthesia have caused a massive shift from inpatient to outpatient care and the bed-planning goal has now been dropped to 2.0 beds per 1000.

A survey financed by the World Bank and carried out by the InterHealth Institute at the request of the Ministry of Health in 1998 produced a series of findings concerning secondary and tertiary care. The results of the survey concerning inpatient care, covering almost one quarter of all hospital beds, are summarized in Table 9. Table 8 lists aggregated indicators available from routine statistics, summarizing the development since 1990.

The data indicate that:

- The number of admissions, excluding chronic care beds, is 21 per 100 population; this figure is higher than in most European countries, but comparable to Austria, Hungary, the Baltic countries, the United Kingdom and Finland (Tables 10).
- The high admission rates at hospitals would support the hypothesis that patients are admitted directly to the hospital without proper care at the outpatient clinic.
- The average length-of-stay, again excluding the chronic care hospital, is at about 9.5 days reasonable and around CEE average, but (still) above most western European countries (Table 10).
- The average occupancy rate is reasonable and within western European figures (Table 10).
- The very high rate of emergency admissions, averaging 70.3% of total admissions (excluding chronic care hospitals) seems to confirm the direct relationship between hospital visits and hospital admissions, as mentioned above.
- The average number of physicians per bed (again, excluding chronic care hospitals) shows one physician per ten beds. The total number of staff is about one per bed.

If all beds are taken into account (and internationally available data are based on that), the development has been close to that of both the EU and the CEE average since 1992. Currently Romanian bed numbers are (still) lower than in neighbouring countries (Fig. 9), as well as e.g. in the Baltic countries (Fig. 10), with which Romania also shares utilization patterns (Table 11).

The sudden drop in hospital beds from 1991 to 1992 with a decrease of almost 28 000 beds was an actual phenomenon, not a statistical distortion. At

11 10.5 10 9.5 9 8.5 8 7.5 7 6.5 6 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 - CEE average Bulgaria ■ Hungary Romania × Slovakia * EU average

Fig. 9. Hospital beds in all hospitals per 1000 population in Romania and selected countries, 1980–1998

Table 11. Inpatient utilization and performance in all hospitals in the WHO European Region, 1998 or latest available year, where acute hospital bed data are not available

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days
Albania	3.0^a	7.7ª	7.9ª
Azerbaijan	9.1	5.1	17.5 ^b
Belarus	12.4	29.0	14.6
Greece	5.5 ^b	15.0°	8.2 ^b
Latvia	9.5	22.0	12.5
Lithuania	9.6	24.2	11.8
Poland	6.2 ^b	13.5 ^a	10.4 ^a
Romania	7.3	20.3	10.0
Uzbekistan	5.6	12.9	12.8

Source: WHO Regional Office for Europe health for all database. Note: * 1997, * 1996, * 1995, * 1994, * 1993, * 1992, * 1991, * 1990;

Acute hospital data provide a more accurate picture of utilization and performance, as well as a more reliable basis for comparison across countries, than the data corresponding to all hospitals shown in this table. The all-hospital data shown here is only for countries which do not provide acure hospital data and should be taken as indicative of general trends.

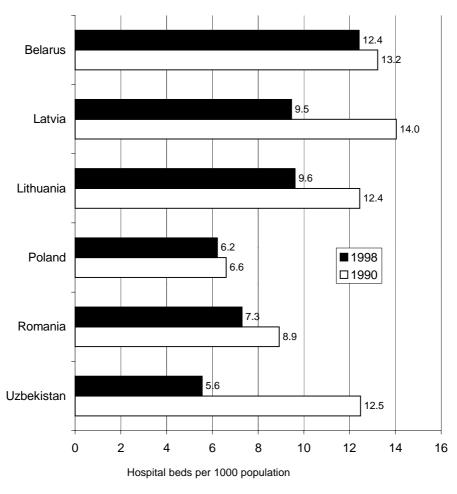


Fig. 10. Hospital beds in all hospitals per 1000 population in the WHO European Region, 1990 and 1998 (or latest available year) where acute hospital bed data are not available

Note: Acute hospital bed data provide a more accurate picture of bed numbers, as well as a more reliable basis for comparison of bed numbers across countries than the total bed numbers shown in this figure. The total bed numbers that appear here are for countries which do not provide acute hospital data and should be taken as indicative of general trends.

that time, the Ministry of Health performed a significant, planned reduction of hospital capacity, agreed with District Health Directorates. The beds targeted for reduction were the excess ones in departments with low bed occupancy. Low occupancy was the result of both the blockage of the overcentralized decision-making process in the 1980s (resulting in the stable number of beds

before) and of changes in health care demand in the early 1990s as consequences of the social and economic transition. The most striking examples of the latter category were the drop of the birth rate after the legalization of abortions and the provision of contraceptives and the decrease of admissions of children to hospitals. The latter can be partly explained by: first, changed legislation, giving mothers the right to care for their children up to the age of two and receiving a financial allowance during that period, instead of only one year and with very little support previously; and second, some improvement of living conditions at home, affecting children's health, due to abolishing restrictions to heating and electricity supply, which were very common in the late 1980s. As a result of decreased demand, occupancy rate of paediatric beds, for example, was below 50% in 1991 and some of the largest reduction occurred here (more than 9000 beds, i.e. over 25% of capacity existing in 1991). Beds in obstetrics and gynaecology were also reduced by approximately 4000 (16% of 1991 capacity) and bed numbers for newborns in maternities dropped by ca. 3500.

The 1999 Law on Hospital Organization regulates hospital organization, functioning and financing. It introduced global budgets and outlined procedures for contracting between hospitals and the health insurance funds. The Law requires that hospitals have operational managerial staff and are led by a Council Board. This board has to be appointed by the hospital owner, though hospital ownership is not always clear. Gradually the majority of hospitals will be transferred from Ministry of Health ownership to local council ownership (see the section on *Health care reforms*).

The previously-mentioned survey from 1998 indicated 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.

Social care

There is not yet a proper community-based social care network in Romania, but a number of organizations may be considered as starting points in its development. The ministries involved in social care are the Ministry of Health, the Ministry of Labour and Social Protection, the Ministry of Education, Department for Child Protection and the State Secretariat for Handicapped People.

According to different research, as many as 40% of patient days in Romania's acute-care hospitals are devoted to social cases. These are patients with minor medical problems who cannot be discharged because suitable alternatives are

not readily available. Long-term and convalescent care facilities, hospice units for cancer and AIDS patients, home care, and other community care programmes are still underdeveloped. As the health reform programme is implemented, hospitals will be under increasing pressure to discharge these patients. The health insurance funds, for example, while authorized to purchase community care services, are under no obligation to pay for care provided inappropriately in facilities or to create or finance alternative community care.

Historically, the Ministry of Health has paid for these non-acute patients as part of its budgetary allocations to hospitals. But with little or no financial support coming from the health insurance funds, the ministry will need to decide how it intends to provide these services in the future. It would be socially unacceptable and politically dangerous to discharge these patients without providing suitable community care alternatives. However, failure to assure such alternatives would obligate the ministry to continue to subsidize hospitals for inappropriate services, seriously restraining efforts to rationalize the use of hospitals.

Until 1998, the Ministry of Health was responsible for infants' homes, which provide care for children up to the age of 3 years (orphans, abandoned children or those whose families are too poor to raise them). Starting from 1998, these responsibilities have been taken over by the Department for Child Protection. After the age of three, they are transferred to Ministry of Education institutions until the age of 18. In 1999, the budget and responsibilities for taking care of children were delegated to local authorities. Due to mismanagement and lack of preparation of this measure, the situation of institutionalized children became extremely difficult. This captured the attention of international organizations in such a way that it became an issue in the EU accession process. The report of the EU Commission mentioned the children's situation as a major barrier for the negotiation process between the EU and the Romanian government. As a result, the Romanian government decided to establish a new Agency for Child Protection that will have to take care of all aspects that until now, were under the jurisdiction of several ministries and state organizations.

The Ministry of Health is also responsible for units caring for people with certain chronic diseases, especially neuropsychiatric disorders.

The Ministry of Labour and Social Protection, through its local offices, administers the state pension system and funds for pensioners' homes. It provides accommodation for pensioners receiving state, cooperative or social insurance pensions, widowers and veterans. Fees for these homes depend on a number of criteria, including clients' income level and the fee policies of individual homes. Elderly people who have no family members to care for them have priority access to these homes.

The State Secretariat for Handicapped People is responsible for elderly homes and nursing homes. The former accommodate those who do not have a pension. Residents, who must be over the age of 50 years and able to care for themselves, are admitted after a social interview at the claimants' residence. They offer some leisure and work activities, as well as social and health care. Nursing homes are not only intended for the elderly, although in practice, they are mostly used by older people. Residents pay a fee, which is deducted from their pension and passed to the state budget; the local council then pays the nursing homes. Care for those without any income is funded from the local council budget. Admission to a nursing home follows the same procedure as entry to an elderly home.

A number of nongovernmental organizations provide medical and social care. Many have been started with assistance from other countries or international donor organizations. External support is still important due to the underdevelopment of this sector in Romania and to the lack of the available financial resources.

Human resources and training

Romanian health care staff can be grouped into four categories: doctors (including dentists); pharmacists; middle-level clinical staff; and auxiliary staff. Other staff categories in the primary health care sector (administrative staff, such as accountants, legal advisers, computing engineers, secretarial staff) account for less than 1 in 20 of health sector employees.

Undergraduate training of doctors and pharmacists takes place in ten stateowned universities, four of which were created after 1989. Training takes six years for doctors and five years for pharmacists. After undergraduate study, doctors complete a year of practical training. Following this, they may pass a national examination. In order to have the right to practise as independent physicians, they have to pass this exam. After this national exam, the physicians could enter a specialist training programme (residency), including the speciality of family medicine, or work as non-specialist ambulatory physicians (general practitioners), in accordance with the score obtained on the test.

Until 1990, each faculty had separate sections for paediatric and adult medicine, and non-specialist paediatricians were common in the primary health care system. Although after graduation doctors can start to practise as general practitioners, during their studies, no emphasis was placed on this type of training. Starting in 1997, new chairs of family medicine have been developed in the main universities of medicine. The Ministry of Education establishes

the number of students who are to enter each year and is responsible for their training. However, since 1990, 30 new medical faculties have been set up (as non-profit foundations) without Ministry of Education approval. Only two of them have since received a temporary authorization. The students of these private medical faculties who graduated were allowed to take final exams and to be licensed at the accredited Faculties of Medicine.

The Institute for Postgraduate Training of Physicians and Pharmacists, the Ministry of Health and the College of Physicians and the College of Pharmacists are responsible for specialist training (residency), accreditation ("competenta") and continuing education. Access to residency programmes is by national competition. The Ministry of Health establishes the number of available places. Between 1982 and 1989, there were no national contests, which led to a decline in the number of specialists. This deficiency was improved after 1990 and the main problem is now the distribution of specialists across the country. Specialist training takes three to seven years, depending on the specialty. There are 48 medical specialties, three for dentists and four for pharmacists. New specialties appeared after 1990, including general practice (with a three-year residency) as well as public health and health management (with a four-year residency). Accreditation as "competenta" is a form of postgraduate training lasting from three to six months for doctors and pharmacists who acquire skills in a complementary field. A new form of postgraduate training called "supraspecialitate" was introduced 1999 and lasts between 6 to 24 months.

The most recent Ministry of Health data indicate that Romania has one practising physician for every 580 people, or 17.7 per 10 000 people, i.e. over 41 000 doctors (1998 data). Unlike in most other countries, this number has not changed during the 1990s (Table 12 and Fig. 11). While comparably low in comparison with European countries and only half as high as in neighbouring countries (Fig. 11 and Fig. 12), this is an acceptable ratio for providing access to primary and specialty physician care for the population. This average number, however, hides the geographic and medical specialty maldistributions which are an issue.

Numbers also hide the quality dimension. Recent reports document insufficient clinical problem-solving capability at certain levels of service provision, which can only be partially explained by lack of appropriate diagnostic and therapeutic equipment and supplies. The strategic and epidemiological changes require new training modalities, such as the creation of the specialty of family medicine and the professionalization of nursing, as well as massive retraining of all service providers at all levels in line with the changed burden of disease.

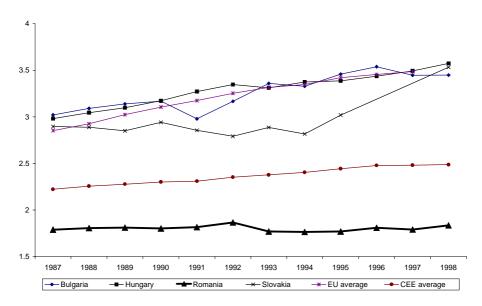


Fig. 11. Physicians per 1000 population, Romania and selected countries, 1987–1998

Private practice reappeared in the health care system between 1990 and 1996, and now most pharmacists and dentists work in the private sector. Only a few doctors work exclusively privately, as most of them are specialists who also work for the public sector. Medical unemployment is not a problem in Romania as there are posts available in rural areas; however, some doctors do not practise or they work in other areas (medical representatives for pharmaceutical companies). There are no data on this.

The plan is to maintain the same number of medical graduates, emphasize the role of the family doctor, and adopt a new system of accreditation for doctors and pharmacists. In order to meet European Union standards, the number of medical specialties will be reduced by merging some subspecialties. Finally, professional associations will be developed and assigned important roles.

Italy (1997, 1989) 5.5 3.0 Spain (1997) 4.2 4.6 Norway 4.1 18.4 Belgium (1998,1996) 3.9 10.8 Greece (1995, 1992) 3.9 2.6 Israel 3.9 6.1 Germany 3.5 9.6 Iceland (1997) 3.3 8.7 Switzerland (1998, 1990) 3.2 7.8 Portugal 3.1 Sweden (1997) 3.1 8.2 France (1997, 1996) 3.0 5.0 Austria (1998, 1997) 3.0 5.3 Finland 3.0 21.6 Denmark (1994) 2.9 7.2 Luxembourg 2.7 7.8 Malta (1998, 1993) 2.6 11.0 Netherlands (1990, 1991) 2.5 9.0 Ireland (1996, 1997) 2.1 15.8 United Kingdom (1993, 1989) 1.6 5.0 Turkey 1.2 1.1 Lithuania 8.8 Hungary 3.6 3.9 Slovakia (1998, 1995) 3.5 7.1 Bulgaria 3.4 7.1 Czech Republic 3.0 8.9 Estonia 3.0 6.2 Latvia 2.8 5.5 ■ Physicians Poland (1997, 1990) 2.4 5.3 □Nurses Croatia 2.3 Slovenia 2.3 6.8 The former Yugoslav Republic of Macedonia 2.0 4.9 Romania 1.8 Bosnia and Herzegovina (1991) 4.7 Albania (1997) 3.7 Belarus 4.4 11.8 Georgia 4.4 4.7 Russian Federation 4.2 8.2 Azerbaijan 3.6 7.7 Kazakhstan 3.5 6.5 Republic of Moldova 3.5 Armenia 3.2 4.8 Uzbekistan 3.1 10.1 Kyrgyzstan 3.0 7.5 Turkmenistan 3.0 5.9 Ukraine 2.9 7.2 Tajikistan 2.0 4.8 0 5 10 20 15 25 Number per 1000 population

Fig. 12. Number of physicians and nurses per 1000 population in the WHO European Region, 1998 or (latest available year)

Number per	1990	1991	1992	1993	1994	1995	1996	1997	1998	
10 000 population										
Physicians	18.0	18.2	18.7	17.7	17.6	17.7	18.1	17.9	18.4	
Dentists	2.9	2.8	2.8	2.8	2.6	2.7	2.6	2.4	2.4	
Nurses	40.5	38.5	39.4	39.3	43.4	43.2	44.1	40.6	40.9	
Midwives	5.1	4.8	4.7	4.7	4.7	4.6	4.4	4.1	4.0	
Pharmacists	2.7	2.2	1.7	1.2	1.2	1.2	1.1	0.8	0.7	

Table 12. Health care personnel from the public sector, 1990–1998

Middle-level medical staff include nurses (general, public health, paediatric, community and pharmacy nurses), midwives, social workers, dental technicians, etc. Before 1990, there were several training schemes in nursing. Since then, nurses have been trained only at nursing colleges. This takes three years of study after completing high school. Each district has a nursing college and, in 1992, a new basic nursing curriculum was introduced, based on EU recommendations and respecting WHO policy. There were 70 such schools in 1999. A series of private nursing schools have also opened since 1992. They are not regulated by the Ministry of Health. There are estimated to be at least 114 with approximately 31 000 students yearly. At present, ten University Colleges (both public and private) are functioning. Some of them already have authorization from the Ministry of Education. Within the World Bank project, a "training for

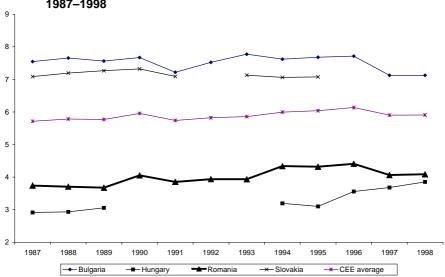


Fig. 13. Nurses per 1000 population in Romania and selected countries, 1987–1998

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

trainers" programme was set up in collaboration with the Royal College of Nursing (United Kingdom), with the aim of changing the way in which nurses are trained. The same programme has helped equip the Centre for Postgraduate Training in Nursing. It is planned that the nurses will acquire new roles and job descriptions and will be increasingly involved in management and policymaking.

Before 1978, when nurse training ceased, nursing was a respected profession, but the role then declined into that of a medical assistant. There is no sense of autonomy, little teamwork and no understanding that nursing and medicine are complementary skills. Much of what is normally regarded as nursing in other countries is undertaken by doctors, who manage nursing/health care at ward level, or it is not done at all, especially psychosocial care. The role of the midwife is likewise mainly a medical assistant. There are too many obstetricians, and little perceived need to develop the role of the midwife; midwives cannot take charge of a birth. In 1990, a Romanian nursing association was founded as well as a Romanian midwifery association. Their major concerns are nurses' and midwives' professional training, setting standards and a national coherent policy of the profession. According to National Health Statistic Centre (2000), there are the following numbers of staff by specialty: 57 630 general nurses, 15 339 paediatric nurses, 8919 midwives, 3618 public health nurses, and 1610 community nurses. Some home visiting is undertaken by nurses who work in primary health care. Nurses making home visits have been trained in small programmes offered by different national and international nongovernmental organizations.

By European comparison, the number of nurses in Romania is low, i.e. almost half of that in Bulgaria and Slovakia, and one third below the CEE average, but as high as in Hungary (Table 12 and Fig. 13).

The institutes of public health, together with the Institute of Health Services Management, have since 1990 carried out postgraduate training of public health, including environmental hygiene, occupational medicine, epidemiology, school hygiene, food hygiene, social medicine, and health management specialists. They also provide courses for students, managers, or other categories of medical personnel who want to acquire competence in public health and management. There are several professional associations in the field of public health: Romanian Public Health and Health Management Association, Romanian Occupational Medicine Association, Romanian Association of Epidemiology. These associations represent doctors (especially public health specialists or decision-makers), economists, pharmacists, nurses and others involved in public health. The Romanian Public Health and Health Management Association discusses the reforms in its quarterly meetings and has been influential in

developing contacts with other central and eastern European specialists. It also organizes conferences to acquire more experience in health system reforms.

There was a shortage of social workers due to the lack of training in this field, but after 1990, new schools of social assistance have been developed at university level and new structures are emerging to use the new social workers. Since 1999, this situation has improved, however.

For the future, the plan is to increase the number of social workers, to train personnel for community care and to increase the number of trained public health and management specialists.

The social status of doctors and the other personnel from the health care sector is low, relating directly to their wages. In 1998, the average wage in the health care sector was below the national average wage as calculated by the National Commission for Statistics. A survey conducted by the Centre for Health Policy showed that 93% of the primary health care physicians considered their income insufficient. Since 1999, this situation has improved, however.

Pharmaceuticals

Pharmacies and pharmacists were among the first health facilities and health professionals that were privatized or allowed to operate their own private business. In addition to major changes during the transition period, the continuous rise in cost of pharmaceuticals has caused increasing concern to the Ministry of Health and the government in general. Measures for cost containment and drug regulation have been introduced on an ad hoc basis. There is not a formal drug policy in Romania, although many of the essential building blocks for developing such a policy are currently being set in place. Pharmaceutical manufacturing, distribution systems and quality are, however, controlled by legislation.

In 1997, the value of the Romanian pharmaceutical market, according to ARPIM (Romanian Association of Producers and Importers of Drugs), was about US \$322 million (ex-manufacturer prices) or US\$14 per capita. The retail value of imported products is expected to grow from US \$195 million in 1998 to US \$348 million in the year 2000, while the market for domestic products is expected to grow considerably slower, from US \$169 million in 1998 to US \$210 million in 2000. The estimate of total pharmaceutical sales in Romania in 2000 is therefore US \$558 million. The Association of Romanian Drug Producers (APMR) estimates the total market value in exmanufacturer prices to be US \$375 million.

Currently there have been take-overs of domestic producers by foreign companies. Most producers are privatized now with the exception of three major companies.

Prices of Romanian products are much lower than those of imported products. The share of local production has been decreasing to about 40% of the whole market value, but in natural units it still covers the majority of consumed drugs. There are no data for the value of drugs under generic name sold in the country, but keeping in mind that all the local products are brandgenerics it can be assumed that the minimal value of generic drug market in the country is US \$225 million.

The Health Insurance Law provides, among other areas, access to reimbursed drugs to the patients. Every year, the Ministry of Health and the NHIF compile a positive list included in 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 recommendations from the College of Physicians and the College of Pharmacists, and has to take the framework contract into account. The health insurance law gives no details regarding criteria on how this drug list is made. Currently, there are about 5500 drugs registered in Romania, with some 100 new applications for registration every month. If a doctor indicates the generic name of a prescription, pharmacists must dispense the cheapest drug. They must inform the patient of its potential substitute.

On this list, drugs are listed as generic compounds in alphabetical order. The reimbursement list applies to outpatients. In fact, there are two lists: one containing 242 generic substances that are 100% reimbursable for people suffering from one or more of 26 diseases (cancer, TB, diabetes, etc.). The other list contains 259 generic substances on which the reference price system is applied and of which 70% of the reference price is reimbursed. The reference prices are based on the lowest-priced product within a cluster of medicines. In addition, patients themselves have to pay 30% of the reference price (i.e. of the lowest-priced product in a 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 actually dispensed drug. These clusters are formed on the basis of the generic substance, the pharmaceutical form and the strength. Rational prescribing and use of medicines are not yet legally fixed explicitly. The College of Physicians is currently developing guidelines and protocols, in cooperation with specialists in the field. It has been decided first to develop treatment guidelines for the medical profession; the selection of reimbursed drugs will follow from these guidelines. However, these guidelines are expected to be ready before the end of 2000.

Price control

According to the emergency ordinance on drugs which came into force on 1 January 2000, the Ministry of Health establishes the price of both locally produced drugs and imported drugs. Before an imported product is allowed to be marketed in Romania, the Ministry of Health has to agree on the price of the product. The importer has to give the price for which he has bought the product (CIF-price). With respect to the CIF-price, the Ministry of Health asks the importers for the prices of the product in other countries: the country of origin, Bulgaria, Hungary and Greece. Subsequently, the lowest price is chosen. The Ministry of Health does not check whether correct information is given.

The same procedure is followed every time a new batch of drugs is brought into the country. If an importer wants to increase his price, he has to ask permission of the Ministry of Health. This permission is seldomly granted. Officially, only the price for which the batch was bought may be charged. This means that the price of products in stock may not be raised.

The importer is allowed to take a gross profit margin of 15%. In order to compensate for the exchange rate risk, an additional mark-up of 15% is added, bringing the total mark-up to 30% (this used to be 25%).

Consequently, the mark-up of the wholesaler and the pharmacist is dependent on the price of the package (usually one-month medication). These margins are gross margins; some importers give discounts to wholesalers. Wholesalers give discounts to pharmacists.

Prior to 1 January 2000, the Competition Office of the Ministry of Finance calculated the maximum prices of locally produced products on the basis of the cost-plus method: (raw materials + salaries + other costs) * 1.10 = maximum price. The profit margin of 10% was before taxes. The Competition Office was in charge with price control of the locally produced drugs. The company had to show the bills to the Competition Office. In the formula there were no provisions for the costs of research and development, marketing and general efficiency improvement. Only if the inflation rate (or the costs) rose more than 5%, could the maximum price be adjusted.

Starting 1 January 2000, the Ministry of Health took over price control of the locally produced drugs and applied a similar formula as that for the imported drugs. The previous prices established by the Competition Office were declared as maximum wholesaler prices (like CIF prices for the imported drugs). Margins on locally-produced products are set up in the same way as for imported drugs.

The National Drug Agency (NDA) was created on 1 January 1999, using a part of the structure of the Institute of Drug Control and Pharmaceutical

Research. The new law regarding the set-up, organization and functioning of the NDA is modelled as an independent agency that is responsible for the registration and the quality inspection of pharmaceutical and other products. Companies apply for registration with the NDA.

There is an Administration Council that consists of representatives of the NDA, the Ministry of Health and the NHIF. This council covers the administrative details of managing the NDA, like fees for the activities developed by the Agency. The decisions of the council are submitted for approval to the Ministry of Health and put into practice after 15 days if the minister does not disagree.

There is also a Scientific Council that establishes the scientific policy of the NDA according to provisions laid down in the law. It consists of members of the NDA, the Academy of Medical Sciences, the faculties of medicine and pharmacy, clinicians, the Ministry of Health, the Ministry of Industry and Trade, the Ministry of Research and Technology, the College of Physicians, domestic pharmaceutical producers and of the international industry. Again, the decisions of the Scientific Council are submitted to the Ministry of Health for approval. They are put into practice after 15 days if the Minister does not disagree. The agency is financed through an appropriate mix of state budget and revenues from services. NDA deals with drug evaluation and registration, drug control and quality control, inspection and pharmaco-economics.

The agency has an advisory and preparatory role in economic issues and may serve as a data collector. With regard to legislative proposals, this remains a responsibility of the Ministry of Health. The minister, through the Department of Pharmacy, may request the agency to prepare the proposal to be signed by the minister, but it is the minister who makes the legislation (or proposes to parliament), not the agency.

The new emergency ordinance on drugs defines and regulates medicinal products for human use, producing and marketing conditions, as well as conditions and measures for assuring their quality, efficacy and safety. It includes, in a comprehensive way, the regulations issued during the previous years such as GLP, GPP and GMP and intends to comply with EU directives. A comprehensive National Drug Policy is developed by the Ministry of Health with the support of the PHARE programme and WHO.

Health technology assessment

In general, hospitals are built by local or central authorities according to a long-term plan. High technology equipment shall be procured by hospitals and

diagnostic and treatment centres (within the allotted funding), on the basis of approval from the central commission, that includes: representatives of the National Health Insurance Fund, the College of Physicians and the Ministry of Health. The initial equipment is paid for by the state budget.

The same applies to new technological equipment. If the service provided is not yet included in the framework contract, the NHIF and the providers negotiate its inclusion and reimbursement level. Technology has to be registered with the Ministry of Health, but the registration requires only proven safety and effectiveness, without a review of cost-effectiveness.

Financial resource allocation

Third-party budget setting and resource allocation

Intil 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 Health to the district health directorates and from district health directorates to hospitals and other providers was based on historical criteria; namely, the distribution of resources (staff, beds) and past utilization data (Fig. 14). The only major change in financial planning on the expenditure side was the establishment of national health programmes with separate budgets within the Ministry of Health budget in 1994. These budgets funded high-cost material expenditures for high-priority interventions, such as drugs for cancer or supplies for dialysis.

Estimates of the distribution of recurrent expenditures on health care reveal that about half of all spending went to hospital care (see the section on *Health care expenditure*; the figures on inpatient care of around 60% in Table 6 include expenditure for *sanatoria*, etc.).

Since 1998, the national budget for health care has two major sources: the state budget and the health insurance funds, with the latter representing more than two thirds of the total health care budget (Fig. 15).

The Ministry of Health is responsible for administering the state health budget. State funding for health is earmarked for specific purposes before distribution to the Ministry of 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 Health allocates funds to the district public health directorates and to its subordinated units mainly on an historical

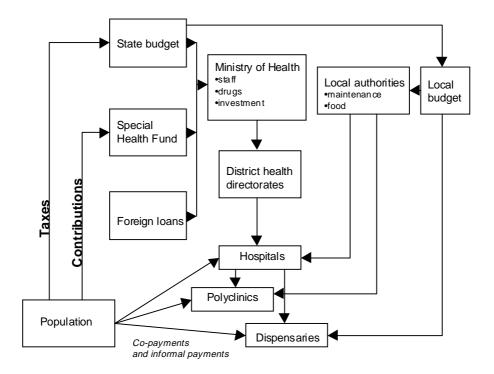


Figure 14. Finance flow within the health sector before 1998

basis. The money is spent on national public health programmes. Capital investment projects are decided at Ministry of 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 14%, equally paid for by employers and by employees (i.e. 7% each; see the section on *Main system of finance and coverage*). The funds are raised at district level by the DHIFs and are redistributed to health care providers on a contractual basis. From these funds, the health institutions' facilities are allowed to pay all the expenses related to health care services except for capital investments which, according to the Health Insurance Law, are under the responsibility of the Ministry of Health.

As mentioned, from the total amount of the money collected at district level, up to 25% is sent to the National Health Insurance Fund and redistributed to under-financed districts. The parallel health insurance funds of the Ministry of Transports and of the Ministries and agencies related to national security have the same positions and roles as DHIFs from the point of view of money flow.

The resource allocation among different type of specialties is determined by the framework-contract and related norms, and is established through negotiations between the National Health Insurance Fund, the Romanian College of Physicians and the Ministry of Health.

Payment for services is shifting away from funding based on input costs. According to the Health Insurance Law reimbursement varies by provider groups:

- capitation and fee-for-service for primary health care
- fee-for-service for specialized ambulatory care
- tariff per hospitalized patient, tariff per hospitalisation, tariff per medical service and negotiated tariffs for certain services in hospitals.

A framework contract, agreed upon annually by the NHIF and the College of Physicians and approved through a governmental decision, defines the benefits package (see the section on *Benefits and rationing*), conditions for service delivery, and payment mechanisms.

Payment of hospitals

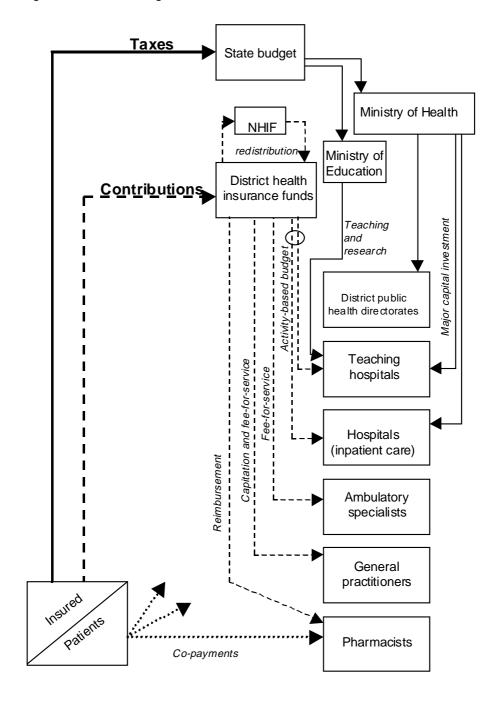
The present system is rapidly changing, shifting from the Ministry of Health towards the DHIFs. Both the Health Insurance Law and the Law on Hospital Organization – together with the framework-contract – have changed the methods of funding hospitals. Thus, public hospitals have global budgets, negotiated with health financing bodies. The management board has to plan hospital expenditure.

Financing is now related to hospital activities rather than to the number of hospital beds or staff, as it was over the last decades. Until 1998, hospitals held territorial funds for both primary and secondary health care and were responsible for the management of dispensaries. Since the introduction of health insurance, the dispensaries have become totally independent from the hospitals.

The Law on Hospital Organization also stipulates the necessity to develop a prospective payment system for hospitals, to change the payment of medical staff and to involve communities in hospital management.

Starting from the last trimester of 1999, the hospitals received global budgets for their *inpatient* activities. These are set at 70% on a historical basis and at 30% on performance criteria. Maintenance and overhead costs have been covered by local budgets since 1993 and are now the responsibility of DHIFs. Major capital investments remain a duty of the Ministry of Health, financed from the state budget. Teaching hospitals and the national health institutes are

Fig. 15. Current financing flow chart



financed jointly by the Ministry of Health and the Ministry of Education. Local authorities are allowed to participate in hospital expenditures, but generally lack sufficient funds.

Until now, the provisions of the Health Insurance Law could not be fully implemented for hospitals, and global budgets for hospital reimbursement and salaries for hospital medical personnel have been used. According to the framework-contract for 2000, the global budgets are negotiated based on the number of admissions, average costs per day, and norms of length of stay by hospital type and department.

In January 2000, the health insurance funds introduced fee-for-service payment for the services delivered on an *outpatient* basis, i.e. these are reimbursed under the same conditions as other providers of specialized ambulatory care (see below). For these, the hospitals are reimbursed while the physicians remain salaried. Expected or "obligatory" under-the-table payments are a common source of additional income.

Payment of physicians

At present, medical staff is paid in different ways, depending on the sector in which they work.

In the primary health care area, physicians are paid a mix of weighted capitation and fee-for-service according to the 1999 framework contract. Seventy per cent (70%) of their income is made up according to the number of patients who register on their lists; the rest is allotted on a fee-for-service basis for preventive and health promotion services such as immunization or cancer screening.

Primary health care physicians also receive a fixed allowance to cover administrative expenses related to their practice and to pay for other staff they work with (practice budget). The former dispensaries, belonging to a hospital both from the administrative and financial point of view, have been transformed into medical offices, i.e. independent and autonomous entities managed by one primary health care physician or a group of them, in accordance with specific legislation.

From late 1999, physicians in ambulatory secondary care are paid on a feefor-service basis while hospital staff continue to receive salaries. Ambulatory specialists have become independent practitioners, having the freedom to make contracts with DHIF individually, or as group practices. Hospital management teams are free to set the physicians' income in accordance with their work performance. The income for all physicians is provided, directly or indirectly, by the DHIFs on a contractual basis. By virtue of this, family doctors represent the first group of physicians in the Romanian health care system that is no longer state-employed. At the same time, in accordance with the new legislation, and once they are accredited and in contractual relationships with the DHIFs, there is no distinction between public and private family doctors.

The fee-for-service system used for family doctors, ambulatory specialists and hospital outpatient departments is based on a list of services included in the framework-contract and its norms of implementation which define reimbursement per service through 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, 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 size determined in advance. Therefore, the point value is different for family doctors and specialists.

Health care reforms

Aims and objectives

his section will describe the principal reforms in the health sector since the revolution in 1989 to end 1999. Particular attention will be paid to:

- background of the reform after December 1989
- the Romanian National Health strategy
- first reform steps decentralization and primary health care reform
- the way towards a social health insurance system.

Background of the reform after December 1989

Following the political changes of December 1989, the overall approach of the new government was to make preparations for the process of change but not to dismantle the existing system until a new health policy had been adopted. Specialist medical training was allowed, post high school training for nurses was reintroduced, the specialty of General Practice was created, health management training was introduced, top priority was given to the tuberculosis and hepatitis B epidemics, and abortion was allowed to, among other areas, reduce maternal mortality.

The Ministry of Health also sought to provide greater information to both the government and the population about problems of the health system. A particular feature of this initial period was the early demand from the medical profession for increasing the role of the private sector and the introduction of a health insurance system. The Special Fund for Health was created in 1992 as a subsidy for the purchase of drugs by patients. In addition, legislation was passed in 1995 to establish the College of Physicians. Since then, elections were held twice for this body, in 1996 and in 1999.

The Romanian National Health Strategy

The Romanian National Health Strategy Project, "A Healthy Future", was funded by the Ministry of Health and conducted by a team from the Nuffield Institute for Health and the Kings Fund College, United Kingdom, as part of a World Bank project. The work, which was completed in May 1993, made a number of recommendations under five categories:

- **Funding**: a fund was recommended to bring together different funding mechanisms (e.g. taxation, contributions) and to be allocated to local government, although resources for public health would be ring-fenced within the fund:
- **Decentralization**: local authorities should be given greater responsibility and autonomy in determining local health priorities and organizing local health services provision;
- **Primary care**: this should be expanded but kept separated from the funding of hospitals, while greater incentives should be given to primary care providers;
- **Hospital autonomy**: this should involve greater autonomy in resource use, along with greater incentives for professionals and quality control;
- **Accreditation**: together with greater autonomy, there should be an emphasis on accreditation.

Elements of these recommendations can be found in the strategy documents adopted by Romanian decision-makers, including the health insurance regulations.

The first reform steps – decentralization and primary health care reform

Initial decentralization efforts during the first years of the new regime aimed at strengthening the role of the district health directorate (DHD). To this end, an experiment was designed and implemented in eight districts between 1994 and 1998. District strategies and objectives were identified for the pilot period with emphasis on primary health care services, human resource performance and motivation, improved management and integration of hospitals as well as community involvement (described in more detail in the section on *Decentralization*).

The primary health care reform began as an experiment in eight districts in 1994 and involved a new way of financing primary health care provision. It consisted of shifted responsibilities for funding and managing dispensaries from hospitals to the DHD. DHDs made contracts with GPs (as individuals or groups) specifying services and standards. GP salaries were replaced with a

mix of weighted capitation and fee-for-service payment. The reforms strengthened the general practitioner as the gatekeeper of the referral system, and also introduced a competitive element through patient choice of general practitioners and new forms of payment. Also, the DHDs obtained more control over funding and management of dispensaries. The experiment was stopped in 1998, but it influenced primary health care reform elements of the Health Insurance Law.

The way towards a social health insurance system

After a political change as a result of the 1996 elections, the new health authorities proposed, as a stated goal, to undertake a comprehensive reform of the health system which would be based on previous experience and would integrate the national and international experience – with special attention being paid to Romania's neighbouring countries.

Working out the reform strategy is part of the evaluation of the system's existing needs: thus, problems and issues were identified, with respect to health, to the organization of norms, and according to available financial, human and material resources. With a view to finding solutions to critical problems, the following health policy principles were defined (Ministry of Health, 1997):

- Health care is a collective social asset and should be accessible to all Romanian citizens, regardless of physical, geographical, economical and sociocultural characteristics.
- The population's universal coverage, consistent with European Union policies and Romanian tradition, should be maintained; due to the present state of affairs and budget limitations, the comprehensiveness of health services cannot be specified.
- Solidarity in financing health services is a joint responsibility of generations, people with different income levels, and people with different health status.
- Health services should receive 5–7% of GDP instead of the 2.5–4% it received between 1990 and 1998, i.e. the Romanian health care reform aims at increasing the national health expenditure and not at reducing it.
- Freedom of choice: Each patient should be able to opt for a physician; in the initial stages, this principle should only apply to primary health care.
- Health professionals should enjoy professional autonomy but observe the principles expressed above. This aims at ending the limitations of professional autonomy imposed by the communist regime.
- Health services should cooperate with other sectors relevant to the health status of the population.

Both short-term as well as medium- to long-term objectives were defined. The first aim was to keep the system operating by means of adjustments compatible with future changes; the second dealt with structural incremental changes. The reform strategy aims to:

- work out a consistent legal framework for health system reform;
- change and diversify the financing sources and production with transparent fund allocation at both intersectoral and intrasectoral levels and stimulation of the private sector;
- separate payers from providers of health services through contracts on payment according to efficiency and quality criteria within a health insurance system;
- redress the sectoral balance, strengthening the outpatient sector and especially primary health care;
- decentralize health organizations; assign roles and duties, establish the relationship between central and local health authorities, health professionals' representatives, financing agents and the population's representatives.

Even if some of these principles and objectives came from previous governments, they define the present political orientation which undertakes to put them in effect, which is the fundamental aspect of change.

Health for all policy

Romania's collaboration with WHO started in June 1948. Many activities took place with the WHO Regional Office for Europe, such as the European Conference of Planning (Bucharest, 1972) and the International Course for Management of Health Services (Bucharest-Sibiu, 1973/1974). Since 1990, the EUROHEALTH programme has formed the basis for WHO's collaboration with the Ministry of Health. It aims to support national efforts towards health development and sustainability in line with the European Health21 strategy.

Collaborative agreements between EURO and Ministry of Health were established according to the priority areas identified at country level for which the Ministry requested EURO support. Thus, country support is based on a joint analysis of priority problems, an assessment of the relevance of the Health21 strategy to solving them and of EURO's potential to respond. This approach reconciles the country's priority needs and the Regional Office's capacities.

Reforms and legislation

The 1997 Health Insurance Law changed the financing of the Romanian health services from a tax-based system to mandatory health insurance. Contribution rates depend on income and are paid in equal proportion by the insured person (the employee) and the employer. In the first year, 1998, employee and employer contributed 5% each; afterwards, each contribution was raised to 7% (see the section on Health finance and expenditure).

Contributions are collected by the DHIFs. Up to 25% of the total funds have to be reallocated to the National Insurance Fund. In 1998, the DHIFs operated as components of the District Health Directorates and afterwards as independent bodies. In the same year, the Ministry of Health acted as the National Insurance Fund; the latter was set up as an independent body on 1 January 1999.

The individual contracts between the DHIFs and the provider organizations include: the list of health services to be provided by health units, the services' quality and efficiency parameters, the method of payment, the hospital length of stay, criteria and medication. The law specifies a positive and a negative list for pharmaceuticals, as well as quality assurance regulations.

The DHIFs contracts with health units that meet the quality criteria approved by the National Health Insurance Fund and the College of Physicians. This is controlled by physicians employed by the District Health Insurance Fund medical division together with the representatives of the College of Physicians specialty boards.

The law also specifies methods of payment by provider: capitation and fee for service for primary health care; fee-for-service for specialized outpatient care and global budget for hospitals (see the section on *Financial resource allocation*).

The Ministry of Health has handed over most responsibilities for financing to health insurance funds and focuses on the national policy of personnel, designing, managing and financing national health programmes, and authorizing capital investments recommended by the District Public Health Directorates (the latter will continue to be financed by the state budget).

The Law on Hospital Organization voted on in the Romanian Parliament in 1999 refers to hospital organization, functioning and financing. The Law stipulates, for example, the operation of global budgets and business plans, categorizes forms of hospital financing, indicates the financing of teaching hospitals, outlines procedures for contracting between hospitals and the health

insurance funds, sets out payment of hospital staff, classifies hospitals, and identifies hospital accreditation, governance and management. In terms of accreditation, a Hospitals Accreditation Commission was to be built up until the end of 1999. The board of this commission is to have two representatives of the following institutions: Ministry of Health, CoPh, NHIF, and one representative from the Hospital Association. As concerns the management and governance of hospitals, the Law states that hospitals should have operational managerial staff and should be led by a council board. The council members should be appointed by the owner. This will probably cause some problems in the future, as the ownership of hospitals is not always clear, and in the near future, according to other regulation, the majority of the hospitals will be transferred from Ministry of Health into local government ownership. According to the new law, hospitals are allowed significant autonomy in terms of decision-making process and freedom to use the allotted budgets.

The pharmaceutical sector is regulated by different norms and regulations from which the most important is the Emergency ordinance no.152/14.10.1999 regarding pharmaceutical products for human use. This was approved by the government as an ordinance because it was not high on the political agenda and would have taken very long to pass through parliament.

Reform implementation

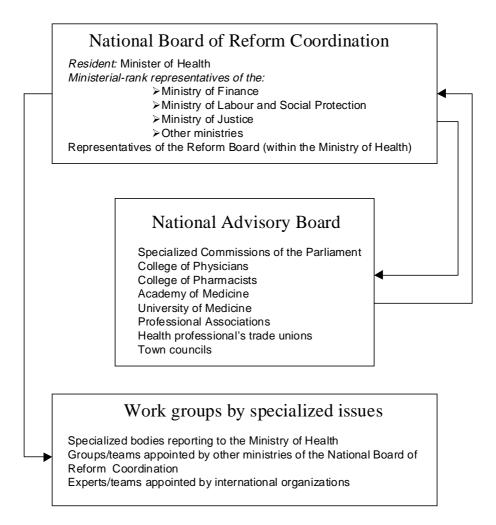
The new outlook proceeds from the belief that the end must not, or rather must no longer justify the means, and therefore the essence of a reform process both democratic and well thought-out should conform to the aspirations of all major health actors.

As a result, both the development and the implementation of the reform strategy should not reflect the point of view of the Ministry of Health only, but should take into account the positions adopted by all the concerned agents inside the health system – leaders of opinion of the health professionals or academic circles, professional associations and major trade unions – as well as outside the health care system.

Enforcing this principle required that a number of coordination and advisory bodies were set up (see Fig. 16).

The reform process has to comply with democratic principles and integrate interests from all groups involved in and affected by health care. The comprehensive strategy of health reform in Romania has defined stages,

Fig. 16. Organization and flow chart of bodies engaged in devising the reform strategy of the health system



Note: With respect to the National Board of Reform Coordination, the National Advisory Board has relations of partnership while the Work Groups are directly accountable to the National Board.

deadlines and roles for its implementation. The institutions described in Fig. 16 functioned as interim bodies from May 1997 until mid-1998 when the new actors assumed their roles. It can be seen as an indicator for the constituency and importance of the health care reform that the major Romanian financial bodies were engaged in the process.

International organizations influenced the reform process in several ways. First, sporadic media coverage of issues relating to orphanages, persons with handicaps and children with AIDS led to the involvement of a number of international NGOs in Romania. When such international attention occurs, the government is forced to take immediate action. Obviously, this is not a basis for setting the agenda of sustainable health sector reform.

Second, the two major reform projects – primary health care and health insurance – show clear influence from health systems of other countries. The introduction of capitation payments and contracting draws on United Kingdom experiences in this field, while the health insurance system draws on the German example. Both projects relied heavily on consultants from these respective countries.

Third, there is a growing presence of international agencies involved in the health field, such as USAID, EU (through PHARE and CONSENSUS), the governments of Germany and Switzerland, the British Council, UNFPA and UNICEF.

Fourth, the World Bank has been an important actor in the process of reforming the Romanian health sector. The WB project started in 1992, involved a loan of US \$150 million and was concluded in 1999. The project has sought to rehabilitate primary health care services and finance the first steps of health sector reform. Recommendations from the project report informed parts of the health care reform.

The EU was important in the health sector through PHARE assistance. The most recent programmes in this field support the restructuring of the financing mechanisms, i.e. introduction of health insurance, the reorganization of the public health administration in accordance with the Health Insurance Law and the development of a National Drug and Blood Policy. These programmes had a budget of 4 million Euro. As outlined above, the EU also supported the restructuring of child protection policies.

Problems and obstacles

The main obstacles faced in the implementation of the reforms were – and are – due to problems related to both political and managerial issues. Between June 1996 and June 1998, there were six different Ministers of Health and eight different Secretaries of State; between January and August 1999, there were three different Presidents of the National Health Insurance Fund. At the district level, this situation of constant change was even more pronounced, for both government and DHIF representatives. This led to some disruptions in the reform process and in the implementation of new laws.

Circumstances that are specific to Romanian society led to important amendments of the Health Insurance Law. These included the distribution of powers between key players, an initially incomplete definition of roles and responsibilities of the key stakeholders, lack of leadership and managerial skills at the level of the Ministry of Health that caused a delay in health insurance implementation, recommendations of foreign bodies such as the World Bank, economic difficulties, etc. Some of these issues influenced the structure of the Romanian health care system. For example, two separate health insurance funds have been created for people working in the Ministry of Transportation and in the Ministries and Institutions related to the national security (Ministry of Interior, Ministry of Defence, Ministry of Justice, Intelligence Agencies).

The Romanian health sector reform should also be acknowledged as part of the broader transition to a market style economy and political pluralism. It has to be noted that the introduction of the health insurance system is taking place in a period of economic recession, which increases pressure on public expenditure and leaves the government little room for manoeuvre. Additional resources are needed in the reform process.

The Health Insurance Law is in its third year of implementation, but different parts of it still need to be adapted to the political, social and economic changing context. Implementation of the Law on Hospital Organization started in July 1999. In the first stages, the Hospitals Accreditation Commission has been established and it is now in the process of drafting its by-laws and regulations.

The main changes are occurring in the primary health care sector, where the general practitioners, or family doctors, are becoming independent providers, paid on a contractual basis by the health insurance funds. By the end of 1999, all general practitioners had negotiated contracts with the DHIFs. At the secondary care (ambulatory) level, the reimbursement changed from salaries to fee-for-service.

Conclusions

In this context, one of the main problem arising is that which is related to authority and coordination of the whole process of change. Thus, there are new entities with important roles in the health care area, but with few management and administrative skills, alongside the "old ones" which did not adjust their structure and function to the new reality. Moreover, health legislation is very complex and changes almost monthly. This can be illustrated by the Health Insurance Law which was adopted in August 1997 and has been amended several times since, and by the Law on Hospital Organization from June 1999 that has already been amended. Constant change complicates a coherent decision-making process and a sound management of the system, both at macro level and at the micro level.

In the near future, coordination and establishment of clear roles for the main actors will be one of the major challenges for the Romanian health care system. While changes since 1989 have sought to overcome these problems, the process of change will continue and the current process of health care reform is trying to address some of the problems pointed out above.

The Romanian situation concerning health expenditure is somewhat unique as it is trying to increase expenditure both on a per-capita basis and as a percentage of GDP. On both accounts, Romania spent extremely little during the 1990s. The introduction of social health insurance was therefore seen as a solution to overcome this limitation. Experience has already shown, however, that increasing the financial basis of the system depends on both the ability to collect and the willingness to pay contributions according to law. For the near future, it remains to be seen whether Romania has found the correct balance between deliberately increasing expenditure and controlling unnecessary

spending through its chosen forms of reimbursement (mix between capitation, fee-for-service and activity-dependent budgets).

Particular attention has to be given to pharmaceuticals in this respect: Currently, per-capita spending on drugs in Romania represents just 8–10% of spending in other eastern European countries and an even smaller proportion of expenditures in western Europe. However, experience from neighbouring countries, such as the Czech Republic, Hungary and Poland suggests that the demand for health services can easily outstrip the growth in national income, with increasing cost pressures from pharmaceuticals. The health insurance system in Romania, therefore, needs to anticipate and be prepared for similar kinds of developments.

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