

# Health Care Systems in Transition

Lithuania

















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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#### Target 19 - RESEARCH AND KNOWLEDGE FOR HEALTH

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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WHO Regional Office for Europe
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# **Foreword**

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

The Observatory is a unique undertaking that brings together WHO Regional Office for Europe, the Governments of Norway and Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine 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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he HiT on Lithuanian was written by Gediminas Cerniauskas and Liuba Murauskiene (Health Economic Centre, Vilnius) and edited by Ellie Tragakes (European Observatory on Health Care Systems).

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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.

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

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

The research director for the Lithuania HiT was Josep Figueras.

Administrative support, design and production of the HiTs has been undertaken by a team led by Phyllis Dahl and comprising Myriam Andersen, Sue Gammerman and Anna Maresso. Special thanks are extended to the WHO Regional Office for Europe health for all database from which data on health services were extracted; to the OECD for the data on health services in western

Europe, and to the World Bank for the data on health expenditure in central and eastern European (CEE) countries. Thanks are also due to national statistical offices which have provided national data.

# Introduction and historical background

# Introductory overview and historical background

he Republic of Lithuania is situated on the east Baltic coast. It is bordered by Belarus to the east, Latvia to the north, and Poland and the Russian Federation's Kaliningrad enclave to the south. The population is approximately 3.7 million and the surface area is 65 300 km². The capital, Vilnius, has a population of 580 000 and 68% of the population live in urban areas. Lithuanians account for 80.7% of the population. Lithuanian is the official language, although Russian is widely spoken. The population is mostly Roman Catholic. About 8.7% of the population are Russian, 7% are Polish and 1.6% are Belarussian.

Lithuania was an independent Grand Duchy in the Middle Ages. It was subsequently in the union with Poland, and in the late 18th century became part of the Russian Empire. Following the end of the First World War, Lithuania was an independent state until it was absorbed into the USSR after the Second World War. Between 1918 and 1940, a health care system based on the Bismarck model began to develop. After the country's absorption into the USSR, however, health care was reorganized according to the Semashko system. Lithuania's health system was relatively well funded and the population's health status was better than in other parts of the USSR. In March 1990 Lithuania declared its independence from the USSR, and in September 1991 it became a member of the United Nations. Since then, there have been a series of reforms of the national economy and the health system.

Severe recession and hyperinflation marked the structural crisis of the first phase of economic transition. Economic recovery and positive GDP growth first appeared in 1995 (or 1994 according to GDP figures expressed in US \$ adjusted for purchasing power parity). Currently GDP in US \$ PPP in Lithuania is comparable with figures for Bulgaria, Latvia, and Romania. From a peak of over 1000% in 1992, inflation was reduced to two-digit levels in 1994 and by

Fig. 1. Map of Lithuania<sup>1</sup>



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

1998, at 2.4%, was one of the lowest in the Central and Eastern European states. Unemployment is still rising, however, and the official unemployment rate is 8.5% (as of 1 April 1999); if part-time work and hidden unemployment are included, it may be as much as 14%.

<sup>&</sup>lt;sup>1</sup> The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Care Systems or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

GDP per capita US \$ PPP

Unemployment rate (%)

	1992	1993	1994	1995	1996	1997	1998	
GDP growth rate (%)	-21.3	-16.2	-9.8	3.3	4.7	7.3	5.1	
Annual inflation rate (%)	1 020	411	45.1	37.2	13.2	8.4	2.4	

4 011

4.5

3 843

6.1

- 4220

5.9

6.4

7.1

Table 1. Macro-economic indicators

Source: Statistical yearbook of Lithuania (for GDP growth); WHO Regional Office for Europe health for all database.

3 700

3.5

3 110

3.5

Lithuania is governed by a single chamber parliament (*Seimas*), elected for a four-year term, and a president elected for five years. The next *Seimas* elections are due in autumn of the year 2000. The country is administratively divided into ten counties (*apskritis*), each of which is headed by a centrally appointed county governor. The counties vary in size, the smallest having a population of 130 000 persons and the largest 894 000. The counties are essentially administrative tiers of central government with certain responsibilities in transport, agriculture, education and health care. There are additionally 56 local governments or municipalities, each with its municipal council, elected every three years. These represent areas that vary in population from 5000 to the whole of Vilnius. Municipalities have little power to raise taxes, though they do have some rights to set priorities in financing education, cultural activities and health care. An advisory council made up of the municipal mayors has a say in county-level politics.

The demographic development of Lithuania during first decade of transition was quite comparable with the average trend for Central and Eastern European states. The significant deterioration in health status which occurred during the first phase of social reforms was halted in 1994. The standardized death rate decreased from 12.06 (per 1000 population) in 1994 to 10.16 in 1998. In 1998 the major causes of mortality were diseases of the circulatory system (standardized rate of 5.28 per 1000 population), malignant neoplasms (1.94) and accidents, poisons, trauma (1.46) (Demographic yearbook, 1998, Department of Statistics, Vilnius, 1999). The infant mortality rate, at 9.27 per 1000 live births (1998), is low by comparison with other countries of the former Soviet Union and it is comparable with the average of Central and Eastern European countries. The situation regarding life expectancy at birth is similar.

Table 2. Demographic and health indicators

	1990	1992	1994	1996	1998	
Population (millions)	3.71	3.74	3.72	3.71	3.70	
% over 65 years (%)	10.93	11.12	11.68	12.26	12.88	
Crude birth rate (per 1000 population)	15.33	14.33	11.51	10.56	10.00	
Crude death rate (per 1000 population)	10.71	11.08	12.49	11.56	11.01	
Total fertility rate	2.00	1.89	1.54	1.43	1.36	
Female life expectancy at birth	76.40	76.07	74.96	76.14	77.04	
Male life expectancy at birth	66.57	64.94	62.80	65.06	66.66	
Infant mortality (per 1000 live births)	10.22	16.54	14.08	10.08	9.27	

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

# Organizational structure and management

# Organizational structure of the health care system

Significant changes in the system have been prompted by two major factors: the appearance of a third party payer in the form of a statutory health insurance system; and enforcement of legislation redefining property rights and the status of health care institutions. Nowadays the vast majority of Lithuanian health care institutions are non-profit-making enterprises. Public health care institutions are financed by the Statutory Health Insurance Fund (SHIF). Property rights and administrative functions fall under the jurisdiction of the central government (Ministry of Health), its ten county branches (the county administration), or the 56 municipalities. In addition to publicly provided health care, a private sector has developed, providing mostly outpatient health care services which are paid for out-of-pocket.

The Ministry of Health is responsible for general supervision of the entire health care system. It is strongly involved in drafting legal acts and issuing the consequent regulation for the sector. It also runs a few (13) health care facilities. With the decline in scope of directly administered health care institutions, maintenance and development of tertiary health care became the focus of the administrative activities of the Ministry of Health. The ministry now shares responsibility for running two major Lithuanian teaching hospitals with the State Vilnius University and the Kaunas Medical University. The Ministry of Health has an overall responsibility for the public health system's performance. Through the State Public Health Centre it manages the public health network including ten county public health centres with their local branches (in total 50 institutions). The State Public Health Centre has subordinate bodies to deal with prevention of communicable diseases, health education and other public health functions. The Ministry of Health develops a public health care

infrastructure by establishing state programmes aiming at the achievement of key health targets (including those detailed in the National Health Programme) and by making decisions together with Ministry of Economy and Ministry of Finance on major investment projects.

Regulation and control of work safety conditions are the responsibility of the Ministry of Social Security and Labour while the Ministry of Health is in charge of the performance of occupational health care providers.

At the regional level each of the ten counties has a county governor who is appointed by the Lithuanian Government and is responsible for implementation of state policy in a number of spheres including health care. The health care function is carried out by the post of County Physician. Some health care providers (county hospitals, specialised health care facilities) are governed by the county administration. Decision-making in this network of providers requires participation of the Ministry of Health. The counties are in charge of enforcement of the state health programmes in their respective regions.

The municipalities are responsible for providing primary health care to their local populations. They have been granted property rights for outpatient facilities and nursing homes. Municipalities are engaged in running small and medium sized hospitals within their localities, in accordance with legislation which has delegated this function to them. A decentralization process defining the health care facilities' subordination to the county or municipality was launched three years ago. This has not yet been completed, as there are still discussions on who (counties or municipalities) should be responsible for medium-sized hospitals, and how administrative responsibilities should be allocated between the different levels. The position of Municipality Physician has been established with supervisory and decision-making authority in the field of primary health care. Moreover, municipalities have a wide range of responsibilities in the implementation of local health programmes and improvement of public health activities.

Local health care infrastructure, until 1996, was organized and financed in a pyramid fashion. Municipal hospitals were at the top of the administrative and financing pyramid, below which were specialized local medical institutions and village hospitals, followed by ambulatories and finally health posts at the bottom. The picture of the outpatient institutions' network has since changed significantly as a result of the process of separation of facilities (most commonly, polyclinics and ambulance services) from hospitals. Currently, various outpatient models are in use in municipalities. The majority of primary health care services are provided by primary health care centres since 1997, which specialize in primary health care provision, in contrast to polyclinics which provide both primary and secondary outpatient services.

The county authorities are currently experiencing a lack of administrative capacity to run their health care systems. Moreover, different counties have significantly different administrative capabilities because health system infrastructure was historically developed around the five major cities. At the same time, municipalities with increasing responsibilities in health care provision for their local populations lost the financial tools which would allow them to enforce their decisions as the newly established statutory health insurance fund assumed responsibility for financing of health care.

A statutory health insurance scheme was first implemented in Lithuania in 1991. Between 1991 and 1995 it was limited in scope, covering pharmaceuticals and spa care which were partly reimbursed through a general social insurance scheme. This scheme was administered by the State Social Insurance Agency (SODRA) and supervised by a tripartite council consisting of representatives of the Government, the trade unions and employers' organizations. In 1992, the State Sickness Fund, a kind of purchasing agency under Ministry of Health supervision was established by the government, and was financed by the Ministry of Health. Between 1992 and 1996, the State Sickness Fund's role was to finance the recurrent costs of health care institutions on the basis of contracts with prospective payments. In 1997, the functions and responsibilities of the State Social Insurance Agency (SODRA) were transferred to the State Sickness Fund, alternatively known as the Statutory Health Insurance Fund (SHIF), in accordance with the 1996 Law on Statutory Health Insurance. This law established a separate social insurance scheme covering health care expenditures, to be administered by the State Sickness Fund and its ten regional branches, the territorial sickness funds (one such fund for each county). A scheme of cash benefits for sick leave and maternity (as well as pensions) is now administered by SODRA. More information on the respective responsibilities of these institutions is included under the section on *Planning*, regulation and management.

The private sector plays a significant role, especially in dental care, cosmetic surgery, psychotherapy and gynaecology. In 1995 the private sector also accounted for 100% of wholesale and 73% of retail trade turnover in the pharmaceutical sector. Up until the end of 1997 a few dental polyclinics had been privatized. No hospitals have been privatized, and there are no official plans to privatize polyclinics or larger hospitals. In 1998 a debate on privatization of general practice was initiated by the Ministry of Health, and guidelines concerning this form of privatization were approved in late autumn 1998. Private health insurance is permitted and there are a few private insurance companies mainly dealing with coverage of health care expenditures of Lithuanian citizens during foreign travel and for foreigners residing in Lithuania.

There are two competing associations of medical professionals: the Chamber of Physicians and the Association of Medical Professionals. Specialized professional societies of physicians, dentists, pharmacists, public health specialists and others deal with professional standards and continuing education of their members.

Among voluntary organizations, the Red Cross Society, the Caritas Federation, the Diabetic Association, the Association of the Blind and Visually Handicapped and the Society of Chernobyl Victims have been influential in public debates. The Church has a limited role in the health sector. One hospital in Vilnius is administered by the Catholic Church. In addition, few rural nursing homes are administered and financed by the Church.

The general structure of the national health system is presented in the organizational chart (Fig. 2). It illustrates the administration of the public health care institutions, which account for about 90% of all health services provided in the country. In addition, there are two parallel state-run health care systems that account for up to 2% of total public health care expenditure. One is run by the Ministry of Internal Affairs and serves the police and prisoners. The other is run by the Ministry of Defence and provides health care services for military personnel. The Ministry of Finance funds health care delivery provided under the supervision of the Ministry of Defence, the Ministry of Internal Affairs and the Ministry of Social Security and Labour. The latter ministry is responsible for the functioning of homes for the elderly and facilities for disabled children and it finances medical support within these institutions. While the importance of integrating nursing and health services is one of the points in public debate there is no sound plan to integrate the national health care system and health services of defence and police agencies.

Since the restoration of independence in 1990 there have been four phases in the development of the health care system. The first was characterized by devolution. Between 1990 and 1992 the role of municipalities in administering outpatient care and most small and medium-sized hospitals was increased. In addition, medical universities became more autonomous. During this period, the general public was suspicious of even the use of the term "planning", as it seemed to be a relic of the Soviet system. The prevalent ideology was that physicians, institutions and municipalities should decide on the range and quality of health care services. There were therefore only some limited attempts at national health planning. Based on the WHO health for all strategy, the National Health Concept was adopted by the *Seimas* (parliament) in 1991. This concept states the objectives of health care policy for the medium and long term, and still constitutes the intellectual basis for decision-making in the field. However, as it was not backed up with at least a medium-term implementation

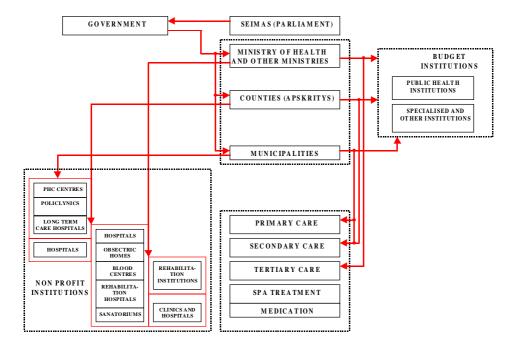


Fig. 2. Organizational chart of health care system

plan, very few of its targets have been achieved. The liberal approach to health care administration during these years favoured open-minded thinking in medical circles. At the same time, however, it led to increasing coordination problems between decision-makers and institutions, and reduced financial and clinical control over providers' activities. The main form of health planning at that time was the annual procedure for planning the state budget, the municipal health budgets and the SODRA budget. The main task of financial plans was to agree on the structure of health care spending. Earmarked budgets were fixed for salaries, drugs, nutrition and infrastructure expenses for each institution. A major weakness of this approach, however, was the lack of any long-term planning.

The second phase took place in the period 1993–1994 and was marked by public debates on the issues of private versus public administration of health care institutions and free patient choice of physician versus a gatekeeping role for general practitioners. The outcome was a general agreement on an incremental process of reform. At this time, the publicly run health system was increasingly underfunded, the population's health status was deteriorating and there was an uncontrolled privatization of the pharmaceutical sector. As a result, very few changes actually took place.

In the third phase, from 1994 to 1995, a number of political decisions were taken. These were to implement a statutory health insurance scheme, and to deconcentrate health care services by shifting administration from the Ministry of Health to the ten counties. It was also decided to strengthen the primary health care sector by reducing physician specialization (in areas other than general practice) in outpatient care. The necessity of long-term planning and the difficulties in managing change began to be understood by the authorities, which resulted in much more attention being paid to training managerial staff, and monitoring of providers.

The most recent phase focuses on the development of legal and institutional capacity. In the period 1995–1997 a lot of legislation has been adopted, some of which has been of key importance in that it seeks to establish the legal framework for the health care system. Some of the laws went through the long way of revision and amendments in order to harmonize interactions between alternative legal statements and to facilitate their enforcement. In the meantime, institutional capacity on the national level has been significantly developed. Regulatory agencies involved in licensing, accreditation, registration and control procedures have been created under the supervision of the Ministry of Health.

In 1996–1997 the compulsory health insurance scheme began to be gradually introduced. In May 1996, the *Seimas* (parliament) passed the Health Insurance Law which provided for the establishment of a statutory health insurance scheme, as of 1 January 1997. Responsibility for the running costs of health institutions, which then lay with the Ministry of Health and the local self-governments, passed to the new institutional framework, as did the SODRA functions related to health insurance issues (excluding sick-leave and maternity benefits which remained with SODRA). Under the legislation, the State Sickness Fund (and its ten territorial branches) became the national health insurance agency, and its budget was officially separated and made independent of the national budget.

Since 1998 health care providers increasingly recognize the challenges related to the new financial management system. However there are two major concerns regarding developments in health care sector. First, the democratization process with respect to decision-making in the sector is far from complete. Despite increasing cooperation between administrators, providers and consumers, consumers still maintain the weakest position in the bargaining process. Second, lack of managerial skills and low interest in using professional expertise to make decisions remain serious obstacles in the reform process.

# Planning, regulation and management

The Ministry of Health is responsible for licensing health personnel and keeping the register of medical professionals. The Ministry allocates money for retraining of general practitioners and nurses. The State Accreditation Agency (under the Ministry of Health) is responsible for licensing of public and private institutions, as well as creating mechanisms for the accreditation of public health care institutions upon their request. Another body under the Ministry of Health, the State Medical Audit Inspectorate, is involved in the establishment of medical standards and quality control of health care providers. According to existing legislation, these two bodies together with the State Sickness Fund and its ten regional branches, the territorial sickness funds, can have a strong impact on health care institutions, even leading to closure. Similarly, the State Pharmaceuticals Control Agency has a broad range of responsibilities in regulation of the pharmaceutical sector.

The Ministry of Health participates in the design of investment projects to be included in the state investment programme upon approval by the Ministry of Economy and Ministry of Finance.

The Ministry of Health sets retail pharmaceutical prices and the prices of those health services which, though provided by public institutions, are paid for out-of-pocket. In addition, the ministry also sets reference prices for services paid for by the social insurance funds. Institutions providing spa services are allowed to charge patients above these reference prices and private health care providers also have the same right in the case of secondary or tertiary care services. Public providers have no right to charge patients above these reference prices. The public health system is financed directly by the Ministry of Health.

The government is responsible for setting the total amount of public spending on health care services and the total expenditure on public capital investments. It also regulates foreign loans to be disbursed for health care. The Ministry of Health and the Ministry of Education are responsible for indicative planning of the number of students in medical universities and colleges.

The Ministry of Health and the Ministry of Finance are jointly responsible for the financing scheme, its accounting rules and financial audit.

The decisions of the Ministry of Health in the field of health planning are mainly indicative rather than legally binding. County administrations and municipalities do not have enough capacity for planning the services under their responsibility and are experiencing a lack of authority to enforce their decisions. Municipalities responsible for maintaining and developing their respective health care infrastructure do not allocate sufficient resources for

this purpose. Since social insurance funds do not participate in capital planning, a mechanism to link the health plans of municipalities to national plans and to ensure coordination of investment decisions made by all actors is lacking. While implementation of the health insurance scheme changed the role of the third-party payer, it did not correct the failures of the planning system.

In 1997–1998 the majority of public providers began to implement contract-based financing with the Statutory Health Insurance Fund (SHIF), and introduced accounting rules common to enterprises by replacing cash accounting with accrual accounting.

The State Sickness Fund (SSF) and the territorial sickness funds (TSFs) administer the statutory health insurance system. The State Sickness Fund is supervised by the Statutory Health Insurance Supervisory Board. The board is chaired by the Minister of Health and its members include representatives of other ministries, trade unions, health care providers, municipalities and sickness funds.

The State Sickness Fund is in charge of the entire scheme's performance, it produces regulations, allocates money to and controls the territorial sickness funds, makes procurements; and makes decisions concerning the contingency reserve.

Territorial sickness funds make contracts with health care providers located within respective county borders; pay for service delivery and reimburse expenses for the purchase of pharmaceuticals; and monitor providers' performance.

The TSF supervisory boards, consisting of the county physician and representatives of all municipalities, provide an opportunity to achieve some coordination of activities of the municipal and county authorities, on the one hand, and the third party payer, on the other hand. However harmonization of planning (investment) decisions and purchase of services (paying just recurrent costs) is still a great challenge for the sector. Problems to be addressed include the following:

- there is no comprehensive long-term nationwide investment plan;
- statutory health insurance bodies allocating the greater part of financial resources only marginally participate in investment planning activities;
- communication between the actors in the health care system is problematic, with the result that health care providers sometimes complain of the lack of feedback, the involvement of counties and municipalities in planning is endangered, while health insurance funds are not regularly informed by the Ministry of Health and other public bodies regarding investment, licensing or other decisions for which they are responsible;

 sickness funds are just passive takers of the prices of services determined by the Ministry of Health for the whole country.

# Decentralization of the health care system

All forms of decentralization have been carried out in the reform process in Lithuania. Bearing in mind that before 1990 the country's health care system was only a very small part of the USSR's centralized system, the scope of the changes has been quite significant.

#### **Devolution**

Municipalities are responsible for the provision of about 60% of public health care services. This includes all ambulatories, the majority of polyclinics and small and medium-sized hospitals. Municipalities decide on investments for municipal institutions within limits of municipal budgets. They employ administrative staff (employment of medical staff is the responsibility of the institutions) and may decide on the amount of services to be provided in the community. They register the private health care providers and may also privatize services, with Ministry of Health approval.

There are several drawbacks to the current devolution process, such as the lack of qualified managerial staff in municipalities. It is also common to find that the only acute care hospital is located within the municipality's territory. As a result, the hospital administration often dominates the municipal council in local decision-making. Coordination between municipalities is poor and opportunities are not taken to merge facilities and achieve any economies of scale.

#### **Deconcentration**

This mainly took place between 1994 and 1995. At this time county administrations were made the main bodies responsible for planning and administration of secondary health care, while, from 1997, territorial sickness funds (one in each county) were to become the main purchasers of services. More recently deconcentration has taken the form of shifting the focus of administrative authority over to the regional hospitals, and public health institutions from the Ministry of Health to the counties. At the same time, funding responsibilities have been moved from the Ministry of Health to sickness funds. According to the reform plans, medium-sized acute care

hospitals, which are at present accountable to municipalities, will in future be administered by counties. This should make counties among the key actors in the health care system. The move to counties results both in decentralization of Ministry of Health functions and also in partial centralization of certain functions at present carried out by the municipalities. Health planners in Lithuania hope that these initiatives will address some of the problems that have been experienced with the previous process of devolution.

#### **Delegation**

This form of decentralization is of little importance in today's reform process. The Red Cross, the professional associations of physicians and patient associations are some of the very few examples of nongovernmental organizations acquiring some responsibilities in health care.

#### **Privatization**

There has been significant privatization of state assets in Lithuania. Between 1991 and 1995, about 40% of total public assets were privatized, mostly through the voucher system. Since 1996 large scale cash-based privatization has been initiated. About 70% of the labour force are currently employed in the private sector. Despite this, privatization of the health sector has been restricted. In the early nineties private businesses received some benefits from international funding. Nevertheless, as of late 1999, there were no plans to provide consistent substantial support for private health investments. Contrary to public providers, private health care providers are subject to payment of value-added tax (VAT). This had been imposed in the early period of independence on private providers, and while the Ministry of Health would now like to end this discriminatory treatment, the Ministry of Finance prefers to enforce a revenue-enhancing policy limiting the number of bodies that are exempt from payment of VAT. It is legally possible for a private provider to be reimbursed by a territorial sickness fund with which it has a contract for delivery of health care services, however this practice is not widespread. In a survey conducted in October 1995, less than 25% of health professionals and politicians mentioned private health provision and the market in general as being of future importance in planning and resource allocation in the Lithuanian health sector; it is likely that this opinion has not changed substantially since then.

# Health care finance and expenditure

# Main system of finance and coverage

#### Financing prior to 1997

Intil 1997 the statutory health care system in Lithuania was mainly tax-funded, with the greater part of financial resources coming from local budgets and the remainder from the national (state) budget. There were also elements of statutory health insurance within the state social insurance system.

Generally, local budgets were (and still are) formed from taxes collected within their respective territory (mainly a portion of personal income tax fixed in the annual budget). Some taxes (e.g. property and land taxes) passed directly to the local budget. Others were transferred to the central government from where they were redistributed on the basis of a number of criteria. These included the total population and the population density. The historic rate of expenditure per capita was also an important criterion. This takes into account the actual social infrastructure network within particular groups of municipalities. In effect this was a situation somewhere inbetween an incremental historical allocation and a weighted capitation formula. Municipalities decided exactly how much of their annual budget would be spent on health care delivery. Their decision usually reflected previous spending on health care facilities: a system of historical incrementalism. As a result of this financing mechanism, together with the application of a similar mechanism for social insurance funds (which pay for rehabilitation institutions and sanatoria located in a few areas), geographical resource allocation was quite unequal.

A Law on State Social Insurance was adopted in May 1991. This is an obligatory, single-insurer scheme. Under it, a number of health related payments were made to defray expenses of preventive and curative medical treatment.

These are reimbursement of the costs of pharmaceuticals prescribed during outpatient treatment, and reimbursement of the costs of sanatorium vouchers. This scheme also paid compensation to blood donors and reimbursed transportation (for medical purposes) expenses to the disabled. The scheme was administered by the State Social Insurance Council (SODRA), under the authority of the Ministry of Social Security and Labour. Its financial resources were separate from the state budget. A wide network of territorial branches collected social insurance contributions and paid out benefits.

All employees paid 1% of their personal wage as a social insurance contribution, while their employers paid a 30% payroll tax. There has been a rapid increase in state social insurance spending on medically related benefits which rose from 3% of total social insurance spending in 1991 to 10% in 1995. The main cause of this development was an explosive rise in pharmaceutical prices when the pharmaceutical market was opened to imports. A limited choice of relatively cheap drugs from producers in the former socialist countries was replaced with the conditions of the world-wide market. In 1995 changes in regulations were introduced concerning the reimbursement of registered drugs and calculation of their reference (in Lithuania these are named "basic") prices. Since the cost containment measures were initiated, the relative increase of expenditures for drugs was halted. On the other hand, the administration of SODRA was expressing an interest to shift responsibilities of reimbursement of drugs to the independent statutory health insurance scheme. Relatively high administrative costs and permanent tensions with the Ministry of Health were the two main reasons.

Another problem with social insurance financing of health services was related to territorial resource allocation to sanatoria (spas). Residents of resort areas (where sanatoria are generally located) received considerably more financial resources per capita because of their greater access to these health facilities. A more general problem was connected to the separation of the two major public financing sources, the national budget and the social insurance funds. The competition between providers of acute care (Ministry of Health and municipalities) and providers of spa services financed by SODRA made coordination of financial flows crucially important. Possible improvements were expected to arise when the health insurance scheme would be introduced as a single consolidated health care financing fund.

# Switching to a health insurance system

During the prolonged process of development of the Health Insurance Law, various approaches to health insurance were considered. The idea that prevailed

was that of a statutory insurance scheme administered by the State Sickness Fund and ten territorial sickness funds (one for each county), financed through a fund that was separate from the state budget. The Law on Health Insurance was adopted in May 1996. Enforcement of the law has occurred in two stages: first since January 1997, and subsequently since July 1997.

According to the health insurance legislation, all of the country's residents are to have health insurance coverage. The State Sickness Fund is similar to SODRA in organization (a national office with regional branches), but with different functions. SODRA is responsible for the provision of pension benefits, as well as maternity and sick leave benefits. In addition, it is responsible for the collection of all social insurance contributions. These contributions finance the three branches of social insurance: (a) pensions, maternity and sick leave benefits; (b) statutory health insurance administered by the State Sickness Fund and the territorial sickness funds, and (c) unemployment benefits administered by the Labour Exchange.

Employers transfer a certain percentage of personal income tax and contribute a certain percentage of the payroll tax. Self-employed persons contribute a proportion of their personal income tax. Farmers cover themselves and their adult family members by paying a percentage of their declared income. The exact rate of contribution is set annually by Parliament. The state covers children up to 18 years old, students, beneficiaries of social assistance and social insurance cash benefits, and persons with certain illnesses. The state budget contributes a per capita payment (annually approved by Parliament) on their behalf.

Table 3. Main sources of public finance, (%)

Source of finance	1980	1990	1994	1995	1996	1997	1998	
Public								
National budget	100	100	85	83	81	16	10	
Statutory insurance	-	-	15	17	19	84	90	

Source: Department of Statistics

Data presented in Table 3 indicate that financing of health care through social insurance accelerated dramatically from 1997 following implementation of the health insurance legislation. Since some very important health care functions such as public health, large investments, national programmes in health protection and acute care are still under the responsibility of local and national governments, some reduction of the share of health insurance in health care financing may be expected in the future.

Though the main responsibility in payment for health care has been transferred to the State Sickness Fund, the reforms in Lithuania have retained some basic principles of financing based on general taxation. Only about 20% of SSF revenues were derived from pay roll taxes and contributions of self-employed in 1998, as shown in Table 4. The remainder involves deductions from income taxes or state budget transfers. Lithuania has therefore chosen a mixed financing system based on social insurance contributions and taxation. This financing system represents a compromise between the proponents of tax-based and those of insurance-based systems, and there is no ongoing discussion to change it.

Table 4. Sources of statutory health insurance revenue, 1997–1998

	199	)7	1998		
	Million Litas	%	Million Litas	%	
Health insurance contribution					
(3% pay roll tax)	136.5	10.4	363.1	19.8	
Physical persons income tax	822.5	62.8	1 012.7	55.1	
Earmarked contributions of self-employed	0.4	0.0	7.1	0.4	
Contributions for insured by state					
from the budget	344.4	26.3	444.6	24.2	
Other revenue	5.7	0.0	3.3	0.2	
Total	1 309.4	100.0	1 837.1	100	

Source: State Sickness Fund Database.

In designing the new health insurance system a key concern was to produce an arrangement that would minimize administrative costs. It was therefore decided to begin with a state monopoly in statutory health insurance. The State Sickness Fund is a body accountable to the Prime Minister. The Statutory Health Insurance Board ensures the democratic functioning of this organization, while the Ministry of Health has maintained control of pricing of health care services. In addition, it was decided that administrative responsibilities as well as costs related to contribution collection should stay mainly with other agencies (tax inspection and SODRA). The SSF is therefore responsible only for collection of contributions of the self-employed. As this is a rather problematic area in emerging market economies, it may be changed in the near future. According to proposals under discussion, collection of contributions of the self-employed should be the responsibility of tax authorities or SODRA.

# Health care benefits and rationing

It has been officially stated that the health care system should serve the entire population of the country. The Health Insurance Law requires that all permanent residents should participate in the statutory health insurance scheme. There is a certain contradiction, however, in that according to the Law universal access is made possible (and is based on) residence, yet if contributions are not paid a patient receives services free of charge only in emergency cases.

Traditionally there has been no explicit official list of health services provided (positive list). Various documents guarantee free-of-charge basic or essential services for the population. Nevertheless, the definition of basic services is more general and rhetorical than practical, as criteria or procedures for prioritization of services have not been put into place. The development of statutory and especially voluntary health insurance highlights the importance of clarifying health care services provided by the statutory system. National discussions in spring of 1998 have led to an agreement by consensus that a negative list of health services and positive list of drugs reimbursed by statutory health insurance should be designed. Currently a positive list of drugs is in place as well as reference drug prices fixed by the Ministry of Health. Only drugs prescribed by a physician are reimbursed. In the first two years of operation of the newly established statutory health insurance system (1997 and 1998) there were no limits to services reimbursed by health insurance. In 1999, certain limits in the volume of services that can be reimbursed by the territorial sickness funds have begun to be introduced. There are no plans to introduce an explicit negative list of services.

While Lithuania has adopted a relatively generous approach with respect to coverage of health care services, the same is not true for pharmaceuticals where in most cases insured adults must pay out-of-pocket the full cost of both prescribed and non-prescribed drugs. The statutory health insurance scheme covers children of the insured, the unemployed and state pensioners for reimbursement of the costs of pharmaceuticals used during outpatient treatment. Reimbursement for children up to the age of 3 is 100% of the reference price and those aged between 3 and 16 receive 80% reimbursement. The disabled are also eligible for reimbursement of either 100% or 80% of prices of pharmaceuticals depending on the category of their disability. The insured are eligible for 100% reimbursement in cases of specified illnesses. The Ministry of Health and the Ministry of Social Security and Labour list these illnesses, which presently include mental illnesses, diabetes, cancer, stroke, myocardial infarction, AIDS, tuberculosis and some others.

The trends in drug reimbursement are as follows:

- Increase of benefits for children and mentally disabled;
- Closer correlation of reference prices with those of generic drugs;
- Implementation of more precise control mechanisms; since autumn 1998 there is a national computerized system for checking invoices from pharmacies;
- Most drugs provided in hospitals are free of charge.

Certain health services are paid for out-of-pocket. The Ministry of Health determines a price list which applies to public health care providers. These services include therapeutic abortion, certification of health status, acupuncture, treatment of alcohol abuse, cosmetic procedures, certain nursing services and dentistry (artificial dentures).

Lithuania still has an extensive system of sanatoria. There is no clear long-term policy concerning the future of these services. Opponents of the system argue that these services should be paid for out-of-pocket by everyone, however there is also substantial support for maintaining the present system. A compromise has been achieved whereby co-payments up to 50% of the reference price are imposed.

Children of those insured by the statutory scheme, up to the age of 7, disabled children and the first category of disabled receive full reimbursement of sanatorium vouchers reference price. Other beneficiaries receive full reimbursement when such services are needed for rehabilitation. Pensioners may receive 80% reimbursement for sanatorium vouchers and other insured and their children over the age of 7 receive 50%. There are some restrictions on stays in general sanatoria. Only one claim may be made a year for a maximum period of 18–24 days. Following the decision to transfer responsibility for reimbursement of sanatorium vouchers from SODRA to the statutory health insurance system in 1997, developments in this area included the following: (a) accreditation of some facilities, while others were transformed into institutions providing accommodation/recreation for which there is no reimbursement by the statutory health insurance system, and (b) the imposition of a ceiling on the range of services provided by sanatoria beyond which there is no reimbursement.

Rationing through the imposition of co-payments therefore does exist in the cases of sanatoria and the pharmaceutical sector as well as in dental services. The majority of medical services are provided free-of-charge. Attempts to develop a more precise negative list of health services as well as the introduction of co-payments for doctor visits and bed-days were undertaken several times but failed because of the complexity of the issues and for political reasons. Data from population surveys identify access to dental services and purchase

of pharmaceuticals as the most important problems in health care. These are the two sectors with relatively low public coverage of health care costs.

One of the biggest concerns of the Ministry of Health as of the autumn of 1999 is to define a package for emergency care. This package is to be used for free health care provision for persons (including foreigners) without health insurance. The importance of this issue lies in that those who do not pay insurance contributions are not entitled to free health care except in emergency cases.

Before the Health Insurance Law was adopted, the patient paid for private health services with the exception of some dental care. Since 1997 private providers may be reimbursed by statutory health insurance according to nationally set prices. However contracts between private providers and sickness funds are still not very common. One of the reasons is that private clinics mainly serve the wealthier segments of the population, who can afford to pay private providers more than the statutory health insurance fund. Quite often prices in the private sector are higher than reference prices. The inertia of officers in the public health insurance agencies is also an important factor limiting public coverage of privately provided services.

Accurate data on privately provided services are not available, as information about the activities of private practitioners is not collected once they are licensed. However, some crude assessments might be carried out on the basis of various sources of related information. In a recent sociological survey, the private outpatient services most commonly mentioned by consumers were dentists, gynaecologists and internal medicine physicians. It has been estimated that in 1995 about 50% of dental care services, 80% of cosmetic surgery and psychotherapy services, and about 20% of gynaecology services were provided privately.

As a result of guidelines laid down by the Health Care System Law, a process of drafting regulations on standards of access to health services has been started. It was assumed in 1995–1996 that these standards would be used for accreditation of health care facilities and may help to reduce over-capacity of the sector. The practice during 1996–1998 showed that accreditation (or licensing as it was renamed in 1998) is related mainly to quality assurance. There have been attempts to introduce rationing mechanisms both in outpatient and inpatient sectors. The official Ministry of Health policy is aimed at shifting scarce health care resources from the hospital to the primary health sector by introducing a referral system, retraining of physicians in the outpatient sector and restructuring of hospitals. Some local initiatives for restructuring were presented during a conference organized by the Ministry of Health in the spring of 1999 but these are not supported by a sound national implementation plan. Ultimately, more radical decisions on health care priorities may be required.

# Complementary sources of finance

Table 5 shows the rough structure of total health care expenditures for 1998, which can be used as an approximation for sources of finance.

Table 5. Percentage of main sources of finance, 1998\*

	million Litas	% of total	% of GDP	
Public	2078	73.6	4.9	
Taxes	209	7.4	0.5	
Statutory insurance	1869	66.2	4.4	
Private	657	23.2	1.5	
External charity	90	3.2	0.2	
Total	2825	100	6.6	

Source: Department of Statistics.

It should be noted that the figure appearing here for "statutory insurance" also includes taxation revenues which have been allocated to the health insurance system. According to legislation, the Social Health Insurance Fund (SHIF, or State Sickness Fund) is independent from the national budget, therefore the portion of tax revenues allocated to the SHIF is considered as SHIF contributions and is not reflected in revenues of the national budget.

The "private" category refers to out-of-pocket expenditures and payment of supplementary (voluntary) health insurance premiums, and amounts to nearly a quarter of the total, while external charity represents just over 3%.

## **Out-of-pocket payments**

The main legal cost-sharing measure involves co-payments for pharmaceuticals and some medical aids used during ambulatory treatments and spa services. Some facilities charge patients for some dental care and special tests (e.g. blood tests for hormones). The Health Insurance Law of 1996 stipulated that persons having no statutory insurance should pay out-of-pocket for all health services exceeding the essential ones. Patients must also pay for services if they bypass the requirement for referral to a specialist or hospital. Still, direct payments in 1998 generated just about 5% of revenues in public health care institutions.

The relative share of out-of-pocket payments in total health care expenditures (including co-payments for drugs, spectacles, prostheses and under-the-table payments) is increasing. Estimates based on household survey data suggest

<sup>\*</sup> Sources of finance are approximated by expenditure figures for each source.

that it increased from about 10% in 1990 to over 20% in recent years. Data from household surveys of 1998 indicate that annual private health expenditures per person are about 180 Litas (US \$45) per capita (or about 657 million Litas for the country as a whole); this corresponds to about 3.5% of total average consumption expenditures of a household (see Table 6). Out-of-pocket payments currently cover about 23% of total health care expenditures in Lithuania.

Table 6. Private health care expenditures

	1994	1997	1998	
Health expenditures per household member in Litas	34.8	140.4	177.6	
Total private expenditures in million Litas	129	518	657	
Percent of total expenditures of households	1.7	3.1	3.5	

Source: Calculation based on Department of Statistics data.

The trends presented in Table 6 quite clearly reveal the increase in private health care expenditures. The data also explain why popular support of increases in co-payments is quite low. The majority of the population believe that private financing in health care is already high enough.

About half of private health care expenditures are related to the pharmaceutical sector even though as indicated in Table 7 public coverage of pharmaceutical expenditures was growing until 1997.

Table 7. Turnover and reimbursement of drugs

	1994	1995	1996	1997	1998	
Retail turnover of pharmaceutical and other medical goods (million Litas) Reimbursement of outpatient drugs	259.2	351.0	450.7	517.6	676.3	
by social insurance (million Litas)	78.4	116.3	159.3	283.1	318.2	
Social insurance as % of total turnover	30.3	33.1	35.3	54.7	47.1	

Source: Department of Statistics.

## **Under-the-table payments**

The tradition of making gratitude payments has been inherited from the Soviet past. Lithuanian policy-makers in the early nineties had expected that the problem would disappear very quickly. In the outpatient sector the severity of the problem has been reduced but it is believed that it may have increased in the hospital sector. A survey conducted in 1995 indicated that one fifth of the population made gratitude payments for officially free services in public health

care institutions. Forty per cent of patients treated in public hospitals during the last two years stated that they had paid additional money in order to receive treatment. The major reason for these payments was to buy pharmaceuticals and to pay doctors.

Partial privatization of the health sector and the introduction of health insurance were also in part aimed toward reducing these payments. Privatization of dental services legalized financial transactions in the sector and have decidedly reduced these payments, however a problem still exists in that private practitioners may sometimes be accused of non-compliance with tax regulations. The impact of health insurance implementation is not so clear. The factors that have worked to reduce unofficial payments are believed to be the following:

- Public finances have improved and arrears of health insurance funds to health care providers disappeared in 1998;
- More control of providers is in place;
- Competition of providers reduced their interest to press patients to pay unofficially;
- Financial incentives introduced by health insurance increased productivity in the hospital sector and access to inpatient services.

A survey conducted by the State Patient Fund in 1998 indicates that the scope of gratitude payments has recently been reduced, most likely as a result of these factors.

## Voluntary health insurance

The 1990 Law on Insurance regulates private health insurance, and states that the insured may be anyone who agrees to pay insurance premiums, and insurers may be the State Insurance Agency, joint stock companies, insurance societies or mutual insurance societies. Licenses to engage in the insurance business are issued by the Insurance Council under the auspices of the Ministry of Finance. Contractual conditions of voluntary insurance must be defined in the insurers' regulations or policies and filed with the Insurance Council. There are 16 insurance companies engaged in voluntary medical insurance. The majority of private insurance policies sold are for travel abroad.

There are several reasons why the private insurance market is underdeveloped in Lithuania:

- Formally the scope of services provided free of charge is very generous;
- Services that are commonly paid out-of-pocket in Lithuania (medicines, private dental services) are unattractive for risk pooling by private companies;

• Private insurance companies as well as health care providers lack financial resources and especially know-how in the insurance field.

The Lithuanian Government in its 1996 programme indicated a goal to combine income tax reductions with expansion of voluntary health insurance. A PHARE/Consensus project on supplementary health insurance (SHI) in 1997–1998 developed the following proposal for SHI which was approved by the Ministry of Health:

- 1. The reform should not lead to a substantial reduction of public health care financing (i.e. statutory health insurance) or a substantial reduction of non-health-related public spending.
- 2. It is rational to combine tax reductions with health insurance benefits reduction (in order not to create a health insurance budget deficit) and with the obligation for the patient to pay a certain portion of the premium from his/her disposable income (in order to increase total health care financing).
- 3. The insurance should be voluntary:
  - only those Lithuanian residents who decide to buy additional health insurance should be provided with tax reductions;
  - the insured should have the right to select the insurance agency and to change the agency once a year;
  - opportunities to sign the insurance contract directly with a health care institution should be created; in case the health insurance contract is signed with a health care provider it is important to allow more than one contract per insured person (e.g. contract with a PHC institution and a hospital);
  - the final scope of the supplementary health insurance benefit package as well as the actual premium rate should be determined in the marketplace, with no interference by public authorities.

Due to economic problems, the Lithuanian government shelved ideas of income tax reduction in the summer of 1999. This change in policy probably means that while private health insurance will develop in accordance with the guidelines mentioned above, changes will likely be moderate over the medium term.

## External sources of funding

The main forms of external funding are: charity donations (pharmaceuticals, nutrition, second-hand equipment), and loans from the World Bank and commercial banks (for pharmaceuticals and equipment). Significant technical

assistance has been provided by international organizations (for instance, WHO, PHARE, UNDP) and through bilateral aid (for example, from Denmark, Germany, Sweden, and Switzerland).

Charity was an important external funding factor in 1991–1995. Currently, technical assistance projects (mainly EU-PHARE) as well as commercial loans are the main forms of external funding. For example national figures in US \$ from the Lithuanian balance of payments for the year 1998 are as follows: Charity – US \$34 million; technical assistance – US \$150 million.

Table 8 presents recent developments in charity inflows from foreign countries to Lithuania (all economic sectors). Clearly these inflows are decreasing in absolute and relative terms.

Table 8. Charity and sponsorship, 1996-1998

	1996	1997	1998
Charity in million US\$	58.8	46.7	37.0
Charity as percent of GDP	0.74	0.49	0.35

Source: Department of Statistics.

# Health care expenditure

Only annual figures for public health care expenditures are available from official statistics in Lithuania (i.e. excluding private expenditures). These include expenditures of the national (state and municipal) budget, the social insurance budget and since 1997 the health insurance budget. Sick leave benefits paid by SODRA are included in expenditures of social protection and are not included in figures for health care. The Law of the Health System, approved by Parliament in July 1994, expresses the state's political will to spend on health care no less then 5% of GDP. This target was never actually met but expenditures in 1998 came very close, as public health care expenditure amounted to 2078 million Litas accounting for 4.9% of GDP. The public health care expenditure share in GDP has been steadily increasing since 1992 (see Table 9).

Public health care expenditure in constant 1993 prices decreased from 744 million Litas in 1990 to 442 million in 1996, and subsequently increased to 670 million in 1998. This is explained by the negative growth of GDP from 1991 to 1994. Economic recovery began in Lithuania in 1995, contributing to the later increase of health expenditures in real terms.

	1990	1991	1992	1993	1994	1995	1996	1997	1998*
Value in current prices (million Litas**)	4.11	14.24	128	426	751	1 073	1 325	1 871	2 078
Value in constant 1993 prices (million Litas)	744	814	653	426	436	446	442	574	670
GDP in current prices (million Litas)	134	415	3406	11 590	16 904	24 103	31 569	38 201	42 768
Share of public health care expenditures in GDP (%)	3 1	3 4	3.8	3.7	44	45	42	49	<i>4</i> Q

Table 9. Trends in public health care expenditure, 1990-1998

Source: Calculation based on Department of Statistics database.

If private spending were included, expenditures would be about 15% higher than the figures shown but the share of real GDP would probably be the same as in the table or even lower because the GDP figure does not include the underground economy. Public health care spending in constant prices in 1998 is 90% of the corresponding figure for 1990. There are discussions in Lithuania concerning the quality of the CPI (used to calculate expenditures in constant prices) during the first years of the economic transition. There is a high probability that traditional methods of calculation failed to reflect changes properly, while overestimating the CPI. If this is correct, the pre-reform level of public financing of health care has been reached. There are difficulties with statistical data for years prior to 1992 also because at that time there was no calculation of GDP (only gross material product) and price indices presented in Soviet statistics were of poor quality. Some estimates of GDP since the beginning of the reforms have been made. According to the European Bank for Reconstruction and Development (EBRD), real GDP in Lithuania in 1998 was just 64% of the 1989 level. This assessment by the EBRD clearly indicates that scarce resources are the greatest constraint to social development in Lithuania.

Examination of health care financing trends reveals two distinct periods during the last decade. In 1990-1993 GDP was falling in the country and even if share of the health sector in GDP was growing, health care expenditures in constant prices fell substantially. Since 1996, the expenditure trend became positive because of economic recovery and further increases in the share of the health sector in GDP.

Fig. 3 illustrates trends in health care expenditure as a share of GDP in Lithuania in comparison to the other two Baltic countries (Estonia and Latvia) and the CEE and EU averages. The Lithuanian GDP share lies in between

<sup>\*</sup>Preliminary data

<sup>\*\*</sup>From spring 1994 the Litas has been pegged to the US \$ at the rate of US \$1 = 4 Litas.

those of Estonia and Latvia, and is somewhat below the average over the CEE countries. (It may be noted that the data emerging from the WHO health for all database show GDP shares for Lithuania which are slightly higher than those emerging from Lithuanian calculations, shown in Table 9 above, especially for the latter part of the 1990s.)

Fig. 4 shows the level of health care expenditure as a share of GDP in Lithuania in comparison with other countries in the European Region. Lithuania's 5.1% share in 1998 is only slightly below the CCEE average of 5.3%. Lithuanian figures in the WHO database do not include sick leave benefits (as for example in the cases of Germany and Estonia) or private health care expenditures (as do the data of western European countries). Sick leave benefits accounted for 0.5% and private health expenditures according to household surveys for 1.4% of GDP respectively in 1997. If these percentages are added on to Lithuania's 5.1% share, the result would be a 7% share of GDP.

Fig. 5 shows the share of public expenditure as a share of total health expenditure in Lithuania in comparison to the other countries of the European Region. A discrepancy may be noted between the Lithuanian data appearing in this figure, which puts the public share at 90%, and the data appearing in Table 5

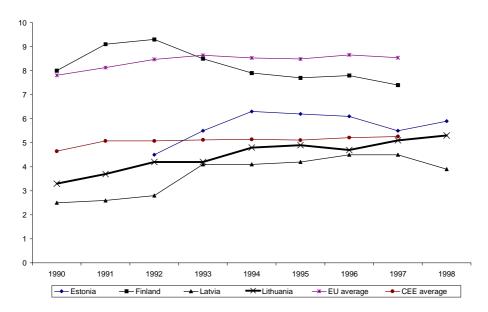


Fig. 3. Trends in health care expenditure as a share of GDP (%) in Lithuania and selected countries, 1990–1998

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

Lithuania

above, where the public share is shown to be substantially lower at nearly 74%. Data on total health care expenditures are never published by the Department of Statistics of Lithuania. This figure can only be obtained by estimates of private expenditure. The figures in Table 5 are based on household surveys carried out annually by the Department of Statistics.

Expenditure estimates based on purchasing power parities for a number of countries are shown in Fig. 6. Although Lithuania does not appear among the countries shown, comparisons can be made with Lithuanian PPP estimates used by the Lithuanian Department of Statistics in national accounts. According to these estimates, public health care spending per capita in Lithuania was US \$298 PPP in 1996, and about US \$450 PPP in 1998. As Fig. 6 indicates, this is substantially lower than the European Union average of US \$1771 PPP (1997-figure), but significantly higher than the two former Soviet Union countries appearing at the bottom of the figure.

#### Structure of health care expenditures

The current structure of public health care expenditures is presented in Table 10 and Fig. 7.

Statistical data on resource allocation by category of care is available in Lithuania only since the health insurance scheme was implemented. Before 1997 most health care institutions were organized as hospitals with an inpatient and outpatient (polyclinic) department. These legal entities were financed on a line budget basis (salaries, nutrition, medicines, etc.) but not according to categories of care. According to the authors' assessment, about 20% of total public health care expenditure was allocated to outpatient care, 65% to inpatient care (including spa), 10% was spent on reimbursement of outpatient drugs, 4% to public health and 1% to public administration of the health sector (1995).

Table 10. Health care expenditure by category, (%) of total expenditure on health care, 1998

	million Litas	percent of total
Primary health care	385.4	18.5
Secondary outpatient care	145.6	7.0
Inpatient care	863.1	41.6
Reimbursement of outpatient medicines	318.2	15.3
Spa services	93.8	4.5
Public health	69.0	3.3
Other expenditures	180.1	8.7
Administrative costs	22.8	1.1
otal	2078	100.0

Source: Statistical Department and State Patient Fund data.

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

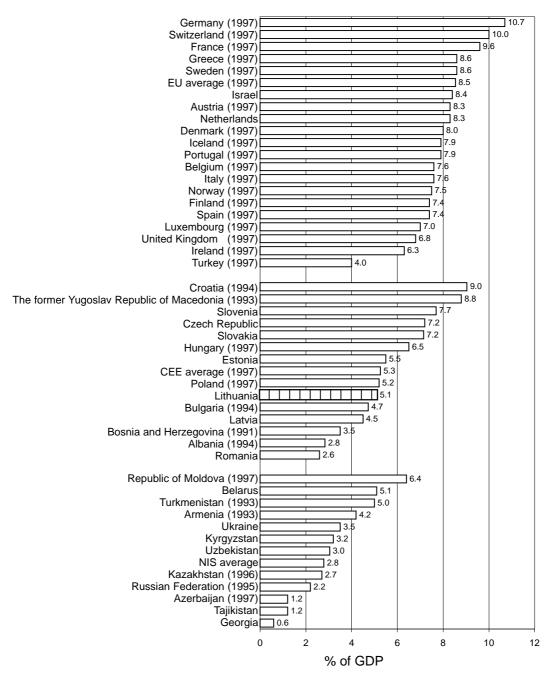


Fig. 5. Health expenditure from public sources as % of total health expenditure in the WHO European Region, 1998 (or latest available year)

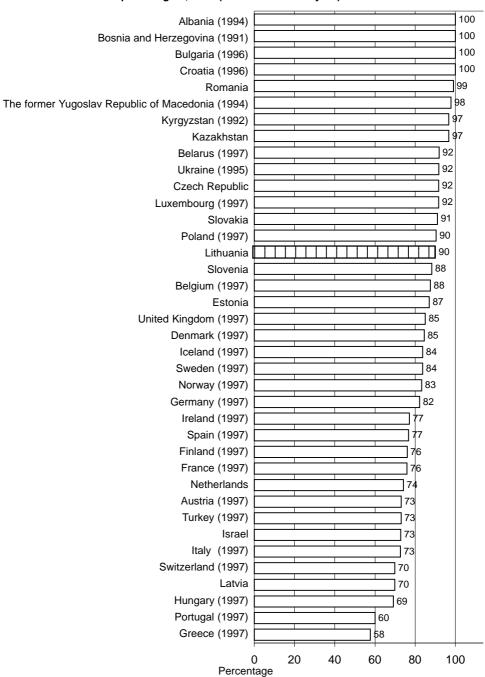
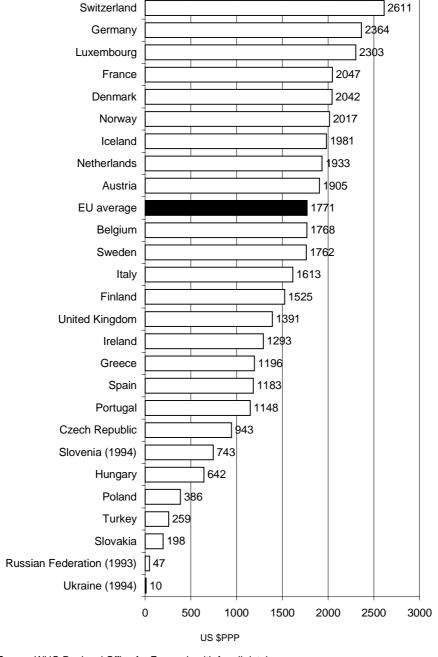


Fig. 6. Health care expenditure in US \$ PPP per capita in the WHO European Region, 1997 (or latest available year)



Lithuania

About 5% of public expenditures was devoted to capital investment in the same year.

The reduction in total health care expenditure in 1990–1993 (discussed earlier) was the biggest challenge for the sector during the first part of the 1990s. A decline in financial discipline made public finances even more problematic. Until 1995 it was quite common that the Ministry of Finance was transferring fewer financial resourses than those specified in the state budget and arrears of health care institutions to the tax office and suppliers of medicines and energy were growing. Since 1996 accuracy of public financing has been improved. The State Sickness Fund had a reserve of 106.1 million Litas (equivalent to expenditures of about 3 weeks) on 1 January 1998. In 1998 no delays of public money transfers to health care institutions were recorded. On the other hand the reserve of the health insurance fund decreased to 3% of the annual budget (equivalent to expenditures of about 1.5 week) on 1 January 1999.

On the expenditure side, in the period 1990–1994 health care financing faced two major challenges. First, there occurred a rapid rise in energy costs due to the end of relatively cheap energy supplies from the Russian Federation. This resulted in an increase in spending on public utilities in the period 1991–1994 from 12% to 20% of the national health budget. Since 1995 the cost of energy became a less important factor in total spending because of stabilization of energy prices and steady increases in total health expenditures.

Second, the shift from pharmaceuticals produced in the former USSR to western produced pharmaceuticals increased the corresponding share in the national health budget from 7.7% in 1991 to 13.4% in 1994. During this period outpatient medicines were paid out-of-pocket or via the social insurance agency (SODRA). Pharmaceuticals accounted for about 37% of the total expenditure on health care in 1995. After prices of pharmaceuticals were somewhat stabilized certain cost containment measures were undertaken. In the summer of 1995, a positive drug list was introduced and social insurance reimbursement of medicines was fixed at the level of prices based on generic drug costs. This together with other measures reduced the rate of growth of expenditures on drugs as well as the share of pharmaceuticals in health expenditures. The share of retail turnover of pharmaceutical and other medical supplies to total public health care expenditures has been reduced from 34.5% in 1994 to 27.6% in 1997. The search for a workable cost containment policy in the pharmaceutical sector is still on the agenda and implementation of efficient monitoring and control is emphasized by the administration of the health insurance system.

While the relative importance of energy costs and pharmaceuticals has been reduced, labour costs have become the biggest concern since the middle of the

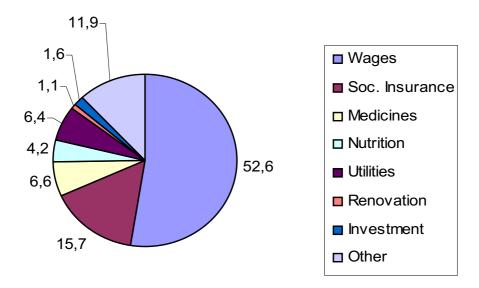


Fig. 7. Health care expenditures in public health care institutions, 1998

decade. Even though average salaries in Lithuania are very low in comparison with European Union countries, increases since 1994 have been quite substantial and Lithuania has already received warnings from international agencies including The International Monetary Fund to lower wage increases. Nevertheless as salaries in the health sector are still relatively low (salaries in health sector are 83% of the national average as of February 1999) the increase in salary levels has strong popular support. Policy makers in Lithuania are trying to strike a balance between this inflationary pressure and financial constraints by limiting personnel numbers in the sector. There are ongoing public debates on how to reduce numbers of medical staff, and suggestions include closing surplus facilities, reducing numbers of medical students and retiring physicians over the age of 65 years. On the other hand, as these debates were initiated almost 5 years ago with no serious results, it is likely that labour costs will continue to create a strong upward pressure on public expenditure over the medium term.

## Health care delivery system

#### Primary health care and public health services

Primary health care as a separately organized sector of health services is a new concept in Lithuania. The term first entered the health policy arena with the National Health Care Concept in 1991. Technical assistance from WHO, UNDP, PHARE and the World Bank has contributed to developing a definition of the term and its underlying principles. These were only accepted by the Ministry of Health as recently as 1995.

A primary health care development strategy has been mapped out for 1996–2005. In 1996, the general practitioner's role, including a gate-keeping function, was defined and pilot projects were initiated in four municipalities. In 1996–1997 operational service standards were set for general practitioners, and the functions of general nurses (specifically midwives, community nurses and mental health nurses) were defined. Programmes of training and retraining of general practitioners and allied personnel were started in 1996.

Primary health care services are delivered in primary health care centres, general practitioner's surgeries, both school and community medical posts (paramedical centres), ambulatories and polyclinics, women's consultancies, nursing hospitals, as well as by the ambulance service (stations and divisions). Mental health centres (free standing or subordinated to other municipal outpatient facilities) employing psychiatrists and other staff are currently in the process of being established in each municipality. The entire network of primary health care institutions is administered by the municipalities. In addition, primary health care is provided in the practices of private physicians.

Paramedical centres or medical posts are based in rural areas and employ one feldsher and/or one midwife. There are about 1000 such centres in rural Lithuania. They provide some routine health care, first aid in emergencies, home nursing, intrapartum obstetric care and also supply non-prescription drugs. Most of these centres are administratively linked to an ambulatory.

An ambulatory is a group practice most commonly found in small towns, which is mostly responsible for providing unspecialized primary care. It includes a general practitioner and/or an internist, a midwife, a dentist and a paediatrician. Currently there are 226 ambulatories across the whole of Lithuania. At the present time some of the physicians working in ambulatories pursue general practice retraining programmes in accordance with programmes provided by municipalities.

Polyclinics employ 10–20 different kinds of specialist physicians. They are equipped with X-ray equipment, ultrasound scanners and other diagnostic technology. There are approximately 140 polyclinics throughout the country. They are responsible for almost all primary and secondary outpatient care in the towns where they are based, and for providing specialist outpatient care to the rural population. Recently, outpatient surgery has begun to be carried out in polyclinics.

Today it is recognized that a new approach to the physician's role in primary health care provision is essential and that this should involve an appropriate mix of skills. It has been agreed that a PHC team requires the participation of a gynaecologist-obstetrician, surgeon, psychiatrist and dentist, together with a general practitioner or an internist or paediatrician as equivalent to a general practitioner. Under current regulations, catchment populations corresponding to these specialties are: general practitioner: 500–2000; internist: 500–2000; paediatrician: 200–800.

In 1998 about 4650 physicians, including 1168 dentists, worked in public primary health care institutions. This constitutes about 32% of the total number of employed physicians. The great majority of primary care doctors are female. According to reliable estimates less than 10 500 nurses (39% of total employed nurses) worked in primary health care in 1998.

Currently the proportion of general practitioners is still quite small, constituting about 6% of physicians working as members of a primary health care team, while internists constitute 41% and paediatricians 29% (dentists are not included).

The first contact physician for adults is usually a specialist in internal medicine (known as the district therapist). The equivalent for children is the district paediatrician. If a trained general practitioner is employed by the institution he or she delivers primary care services for all members of the family.

Vocational training for general practitioners has been available since 1991 and retraining courses for general practitioners since 1993. The rate of training general practitioners is about 150 per year.

In 1997 Lithuanian residents were asked to choose a primary health care facility where they wished to receive primary care. Through the registration process the polyclinics and ambulatories established lists of their respective catchment populations. At the same time a major portion of the population had an opportunity to make a choice upon registration of their particular general practitioner, internist or paediatrician. At the present time a patient has a right to choose any physician employed by the primary health care facility, and to change physician preferably once a year. By 1998, 92% of the population was registered with a primary health care institution.

Development of the general practitioner gate-keeping function is proclaimed to be an important goal of the new approach to primary health care. Patients require a referral signed by the physician performing the role of their general practitioner in order to receive specialist care. However, in 1998 more than 20% of consultations with specialists were provided without referrals. This actually represents a significant improvement over 1996 when 70% of consultations with specialists were provided without referrals.

In 1998 about 30% of outpatient visits were to specialists (not including dental services). While it is very difficult to change traditional patterns in patient behaviour as well as in scope of treatment provided by physicians, a growing share of visits to primary care physicians is partly related to the formal requirement to obtain a referral. Referrals are required for planned admissions to hospitals. In the absence of a referral inpatient services must be paid for out-of-pocket.

Private primary health care is still not very widespread although there are some private gynaecologists, internists and most of all dentists. For the most part private primary care takes the form of solo or small group physician-owned practices. Quite often physicians lease clinic space from public health care institutions. There were 566 private dental practices with 1901 employees in 1998. The share of dentists working exclusively as private providers is high (697 dentists or 79% of the total) in contrast to other medical specialities (179 physicians, or less than 26% of total).

At the moment, the vast majority of health care facilities are publicly owned, but there are plans to partially privatize primary care. Since 1998 the focus of proposals has been on the establishment of private general practitioner practices, which would involve publicly financed primary health care with private general practitioners contracted with the territorial sickness funds. As of the autumn of 1999, a main challenge in the area of primary care facing the government is to establish a sound policy regarding the development of general practitioners as independent contractors. In the absence of such a policy, there will be limited

development of the institution of private practice, despite the government's stated objective to support the development of entrepreneurship (such as, for example, through state guarantees on bank loans).

In 1995, when a representative sample of the whole country was interviewed, about 15% of respondents (mainly residents of rural areas, those older than 50 years or those suffering from chronic illnesses) mentioned monetary costs and time of travel as a barrier to health services. This problem has become more important in the transition years because of the general deterioration of public transport and because transport costs have increased more rapidly than personal incomes.

In response to these problems, there are proposals at the present time to invest in vehicles for general practitioners and to undertake improvements within the ambulance service.

One more innovation within the primary health care sector involves implementation of the concept of community mental health services. Mental health centres in municipalities are currently in the process of being established. Each of these is to be staffed by a team comprising three psychiatrists, one clinical psychologist, three mental health nurses and two social workers.

Fig. 8, showing outpatient contacts per person in the WHO European Region, indicates that Lithuania with 6.5 visits lies below the CEE average of 7.9, and also lies below the averages for the EU and the NIS of 6.1 and 8.1 respectively.

### **Public health services**

The Public Health Surveillance Service was established within the Ministry of Health in 1994, to replace the former sanitary-epidemiological service. It consists of ten county public health centres (with 50 local branches) subordinate to the State Public Health Centre. Through a number of institutions, it deals with communicable disease control, AIDS, immunization, food control, environmental health and occupational health. There is also a National Centre for Health Education. Under the recent reorganization of public health institutions, the separation of hygiene inspection functions from public health functions was achieved.

Communicable disease control has a relatively long tradition in Lithuania and is relatively well organized under its own department. A national programme in the field of communicable disease prevention and control has been recently launched. Environmental health, by contrast, is scattered throughout a number of different organizations. A programme to increase the effectiveness of health

Switzerland (1992) 11.0 76.8 Israel (1996) Belgium (1996) 76.6 76.6 Italy (1994) 6.5 **Germany (1996)** France (1996) 6.5 76.5 Austria 6.2 Spain (1989) 6.1 EU average (1996) 5.9 United Kingdom (1996) **Denmark** (1997) 75.9 75.7 Netherlands 5.1 Iceland (1996) **]** 4.|1 Finland Norway (1991) ] 3.8 73.4 Portugal 72.8 Sweden (1997) 2.0 Turkey (1997) 116.4 Slovakia 14.5 Czech Republic 7 13.7 Hungary Bosnia-Herzegovina (1991) ٦8.5 7.9 CEE average 7.5 Romania 7.1 Slovenia Croatia 6.5 Lithuania ∏6.5 76.3 Estonia Bulgaria 15.5 Poland (1997) 5.3 4.6 Latvia The former Yugoslav Republic of Macedonia 13.1 Albania (1997) 711.8 Belarus ] 9.1 Russian Federation 8.5 Ukraine Republic of Moldova 8.3 NIS average 8.1 Uzbekistan Azerbaijan (1997) 6.0 Kazakhstan 5.7 Kyrgyzstan 4.9 Turkmenistan (1997) 4.6 **Taiikistan** 3.4 Armenia 2.4 Georgia ] 1.2 0 5 10 15 20

Contacts per person

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

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

education between 1996 and 2000 has been prepared by the National Centre for Health Education and Lithuania is a participant in the Healthy Schools Network, the Healthy Cities Network and a regional stroke prevention project.

Immunization follows the extended programme of immunization schedule and is coordinated through the National Immunization Centre. Most district paediatricians carry out immunizations. In addition, primary care doctors carry out routine breast palpation for breast cancer although only a minority do cervical screening or give family planning advice.

The main problems in the public health service include bureaucratic and financial constraints, lack of intersectoral cooperation and staffing problems, and particularly very high staff turnover. Main plans to reform the sector include the harmonization of legislative regulations in order to meet with European Union standards and the reorganization of these services along more rational lines. A draft Public Health Law is currently being debated, reflecting different approaches to the concept of public health and directions of future developments. A large gap still likely exists between those focused on sanitary control functions and those arguing in terms of the broader sense of public health.

In recent years major effort has gone into bringing about changes into public health policy on the national level. The major issues have been the establishment of a national public health strategy, improving the health status of population, increasing public awareness and improving health promotion.

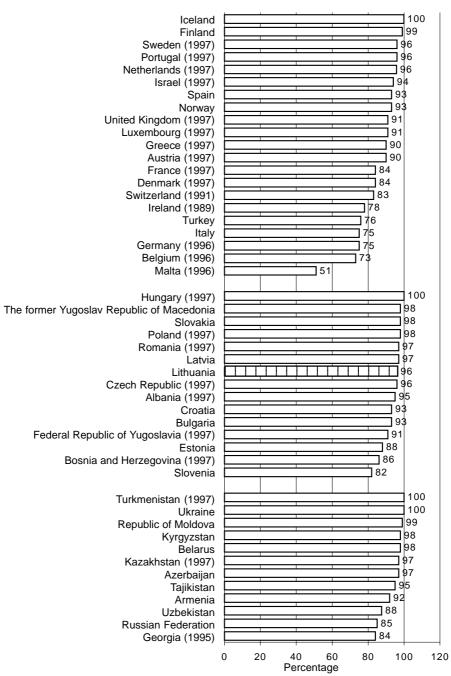
The main directions of public health policy are set according to the goals and targets declared under the National Health Programme adopted by Parliament in July 1998. Priorities for 1999–2000 include: issues related to public health, health education, alcohol and narcotics control, environmental health and disease control. It is stated that particular state and municipal programmes should be carried out to deal with these issues.

In 1998 state and municipal funds have been established to support the activities set through this programme approach.

In the field of tobacco and alcohol control two basic laws have been adopted, a specialized agency subordinated to the national government has been established, and corresponding state programmes were established as well.

Fig. 9, showing immunization levels for measles in the European Region, indicates that Lithuania has achieved very high levels of immunization at 96% (1998).

Fig. 9. Levels of immunization for measles in the WHO European Region, 1998 (or latest available year)



#### Secondary and tertiary care

As of the end of 1998 there were 187 hospitals with 35 612 beds in Lithuania. This includes 76 general hospitals, 68 nursing inpatient facilities, 38 specialized hospitals and 5 rehabilitation hospitals. Sixty-seven percent of the total number of hospital beds are concentrated in general hospitals. This includes more than 5000 beds (23%) in university and teaching hospitals and 10 335 beds in central regional hospitals.

Specialized hospitals concentrate 23% of hospital beds. Within this category, the distribution of beds is as follows: psychiatric care: 52% of beds; tuberculosis: 21% of beds; cancer: 13% of beds; in addition there are specialized hospitals for infectious diseases, and skin and sexually transmitted diseases.

There are 878 beds in rehabilitation hospitals. Besides this, 38 sanatoria are included within the sector.

During the last few years many small rural hospitals have been transformed into nursing facilities. As a result more than 7% of the total number of beds are now used for nursing in relatively small institutions (average size less than 40 beds).

The number of beds per 1000 population has decreased by nearly 23% in the period 1990–1998 but in 1998 there were still 9.6 beds per 1000 (see Fig. 10 B and Table 12 B).<sup>2</sup> In spite of the drop, this still corresponds to one of the highest levels of bed provision within the CCEE.

Fig. 11 shows hospital bed trends in Lithuania in comparison with the other two Baltic states (Estonia and Latvia) and averages of the European Union and the CCEE.<sup>3</sup> The Lithuanian number of beds per population tends to be similar with that of Latvia. This has been substantially above the corresponding level for the CCEE throughout the 1990s, though the difference appears to be narrowing slightly in recent years.

Key indicators of hospital utilization and performance in Lithuania and countries of the European Region are summarized in Table 11 and Table 12B. In international terms there is evidence of significant overcapacity of inpatient facilities, contributing to relatively long lengths of stay and low levels of occupancy. Reforms in health care financing have contributed to the observed steady decrease in the average length of stay since 1980, which accelerated during the 1990s, so that this indicator now stands roughly at the same level as the European

<sup>&</sup>lt;sup>2</sup> It should be noted that bed numbers here refer to all hospitals within Lithuania, not just acute care hospitals, as data for the latter are not available. The figures for Lithuania are therefore not comparable with those appearing in Fig. 10A and Table 12A.

<sup>&</sup>lt;sup>3</sup> Note that as Fig. 11 also contains all-hospital data, it is not comparable with Fig. 10A and Table 12A.

average. Incentives of various kinds including the targets set by the Ministry of Health and payment arrangements have also led to an increasing occupancy rate since 1990.

Table 11. Inpatient facilities utilization and performance in all hospitals, 1975-1998

Inpatient	1975	1980	1985	1990	1995	1996	1997	1998
Admissions per 100 population	19.1	20.2	21.6	18.6	20.7	20.80	21.81	24.17
Average length of stay in days	18.9	19.5	18.6	17.9	14.7	14.0	12.9	11.7
Occupancy rate (%)	92.6	92.5	91.5	76.5	76.3	75.87	76.82	80.44

Sources: WHO Regional Office for Europe health for all database; National Statistics.

On the other hand, admissions per population have been steadily increasing. At the end of 1994, polyclinics in Vilnius and throughout the country were separated from their hospitals. The reason for this was to reduce the potential for supplier-induced demand for inpatient services. In spite of this, an increase in the hospitalization rate can be observed. The number of admissions increased from 744 000 in 1995 to 867 000 in 1998. The newly instituted referral system did not help much in curbing the increase facilitated by the contractual payment arrangements. The major reason for this development is that the reimbursement system creates strong incentives to increase revenues by "inducing" a demand for hospital care. (See the section on *Payment of providers*.) To deal with this problem proposals to change the remuneration system in primary health care have been put forward in 1999. There are plans to reimburse primary care physicians on a fee-for-service basis for services which substitute for secondary care services as of the year 2000, in addition to reimbursement based on capitation.

The majority of specialist ambulatory services are provided by specialists employed in publicly owned polyclinics including outpatient departments of teaching and university hospitals (known as consulting polyclinics). The vast majority of specialist consultations (92% of the total) were delivered in polyclinics as secondary level consultations. Over 4000 physicians or 89% of the total number of specialists working in outpatient facilities (not including dentists) provided an average of 112 consultations each per month.

In the period 1996–1998, physicians, who were usually also employed fulltime in public hospitals, established many small outpatient and a few group inpatient practices on a private basis. A majority of private inpatient beds are concentrated in sanatoria.

About 95% of the population live within 20 km of the nearest general hospital and within 120 km of the nearest regional or university hospital. Consequently,

3.8

3.4

3.5

3.4

4

Hospital beds per 1000 population

6

8

10

2.8

2

Bulgaria (1996) Slovakia 6.5 Czech Republic 8.5 6.0 Estonia 9.2 5.8 Hungary 7.1 5.8 CEE average 6.9 4.6 Slovenia **■**1998 5.0 □1990 4.0 Croatia 4.6 3.5

Fig. 10 A. Hospital beds in acute hospitals per 1000 population in central and eastern Europe, 1990 and 1998 (or latest available year)

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

Bosnia and Herzegovina (1991)

Albania (1997)

0

The former Yugoslav Republic of Macedonia (1997)

Lithuania

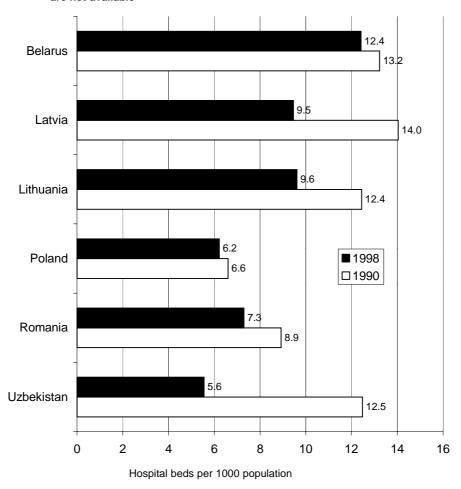


Fig. 10 B. Hospital beds in all hospitals per 1000 population in the WHO European Region, 1990 and 1998 (or latest available year) where acute hospital bed data are not available

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.

access to hospital care is quite good. However, there are a number of concerns regarding the quality of care provided and the financial resources required to maintain the current hospital network.

Reorganization of the inpatient network has been placed on the agenda for reforms. A picture of the future hospital sector contains advanced medical

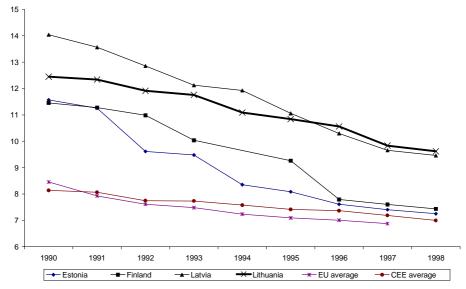


Fig. 11. Hospital beds in all hospitals per 1000 population in Lithuania and selected countries, 1990–1998

services concentrated on the tertiary care level (mostly in university hospitals), specialized services provided by county hospitals and general medical services delivered in community hospitals.

An obligatory licensing mechanism for all health care facilities has been established by the State Accreditation Agency. Among other regulatory functions undertaken by the agency is accreditation of providers on a voluntary basis.

Medical malpractice, attributed to poor staff qualifications and lack of quality control procedures, is one of the greatest concerns of health care managers and the general public. One of the responses to the situation was adoption of the Law on Patient Rights and proposals to enforce court investigations to compensate for harm to health experienced. The activities carried out both by the State Accreditation Agency and State Medical Audit Agency together with introduction of the internal quality assurance systems are aimed to improve the quality of health care services.

Most secondary health care facilities were constructed between 1965 and 1990 and are of relatively good quality. Nevertheless, the economic recession has resulted in a sharp decrease in public financing of health care. As a result there have been cutbacks in repairs of buildings, which caused a deterioration

Table 12 A. Inpatient utilization and performance in acute hospitals in the WHO European Region, 1998 or latest available year

Country F	•	s Admissions		Occupancy
	per 1000	per 100	length of stay	rate (%)
	population	population	in days	
Western Europe				
Austria	6.4ª	24.7ª	7.1 <sup>a</sup>	74.0 <sup>a</sup>
Belgium	$5.2^{b}$	18.0 <sup>b</sup>	$7.5^{b}$	$80.6^{c}$
Denmark	$3.6^{b}$	18.8 <sup>b</sup>	5.6 <sup>b</sup>	81.0 <sup>b</sup>
Finland	2.4	20.5	4.7	$74.0^{c}$
France	4.3 <sup>a</sup>	$20.3^{c}$	$6.0^{b}$	75.7ª
Germany	7.1 <sup>a</sup>	19.6ª	11.0 <sup>a</sup>	76.6 <sup>a</sup>
Greece	$3.9^{f}$	_	_	_
Iceland	$3.8^{c}$	18.1 <sup>c</sup>	$6.8^{c}$	_
Ireland	$3.4^{a}$	14.9 <sup>b</sup>	$6.7^{b}$	82.3 <sup>b</sup>
Israel	2.3	18.4	4.2	94.0
Italy	4.6 <sup>a</sup>	16.5 <sup>a</sup>	7.0 <sup>a</sup>	76.0 <sup>a</sup>
Luxembourg	5.6 <sup>a</sup>	18.4 <sup>d</sup>	$9.8^{b}$	74.3 <sup>d</sup>
Malta	$3.9^{a}$	_	4.5	72.2ª
Netherlands	3.4	9.2	8.3	61.3
Norway	3.3	14.7 <sup>b</sup>	$6.5^{b}$	81.1 <sup>b</sup>
Portugal	3.1	11.9	7.3	75.5
Spain	3.1°	10.7°	8.5 <sup>b</sup>	76.4°
Sweden	2.7ª	16.0 <sup>b</sup>	5.1 <sup>b</sup>	77.5 <sup>b</sup>
Switzerland	5.2 <sup>b</sup>	14.2°	11.0 <sup>a</sup>	84.0ª
Turkey	1.8	7.1	5.5	57.3
United Kingdom	2.0 <sup>b</sup>	21.4 <sup>b</sup>	$4.8^{b}$	- -
CCEE	2.0	21.7	4.0	
Albania	2.8ª	_	_	_
Bosnia and Herzegovina	$3.4^{g}$	$7.4^g$	$9.7^{g}$	$70.9^{g}$
Bulgaria	7.6 <sup>b</sup>	14.8 <sup>b</sup>	10.7 <sup>b</sup>	64.1 <sup>b</sup>
Croatia	4.0	13.4	9.6	88.2
Croatia Czech Republic	6.5	18.4	8.8	70.8
Estonia	6.0	17.9	8.8	70.6 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 Macedor	nia 3.5ª	8.1	8.9	66.5
NIS				
Armenia	6.0	6.0	10.7	30.2
Azerbaijan	8.0	5.6	_	_
Belarus			-	88.7 <sup>d</sup>
Georgia	$4.6^{b}$	$4.8^{b}$	$8.3^{b}$	26.8 <sup>d</sup>
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 <sup>a</sup>
Ukraine	7.4	17.9	13.4	88.1
Uzbekistan	_	_	_	_

Source: WHO Regional Office for Europe health for all database. Note:  $^a$  1997,  $^b$  1996,  $^c$  1995,  $^d$  1994,  $^e$  1993,  $^f$  1992,  $^g$  1991,  $^h$  1990.

available				
Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	
Albania	$3.0^{a}$	7.7 <sup>a</sup>	7.9 <sup>a</sup>	
Azerbaijan	9.1	5.1	17.5⁵	
Belarus	12.4	29.0	14.6	
Greece	5.5 <sup><i>b</i></sup>	$15.0^{c}$	$8.2^{b}$	
Latvia	9.5	22.0	12.5	
Lithuania	9.6	24.2	11.8	
Poland	6.2 <sup>b</sup>	13.5 <sup>a</sup>	10.4ª	
Romania	7.3	20.3	10.0	
Uzbekistan	5.6	12.9	12.8	

Table 12 B. Inpatient utilization and performance in all hospitals in the WHO European Region, 1998 or latest available year, where acute hospital data are not available

Note: a 1997, b 1996, c 1995, d 1994, e 1993, f 1992, g 1991, h 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 are only for countries which do not provide acute hospital data and should be taken as indicative of general trends.

of facilities. Making investment decisions is a complicated issue for health care providers. The mobilization of internal resources is limited due to the decisions associated with changing property rights on local and county levels. Municipal and county budgets have been considered to be the main external source of financing for investments for the majority of health care institutions. However in view of the budget deficit health care providers did not get significant support for capital development. In 1998 renovation of facilities became one of the targets of national investment policy.

Decreased investment in medical equipment resulted in prolongation of average service life (much equipment has been in use for over ten years). Investment outlays have recently started to increase but improvements are rather slow. The investment strategy lacks systematic assessment of efficient, cost-effective and affordable new technologies. Providers of highly specialized care such as heart surgery or neurosurgery are lobbied by the manufacturers to purchase high technology equipment, for example, CT scanners, angiographs or sophisticated ultrasound equipment. This results in a reduction of funds for more effective investment programmes and an increased deficit in health care spending. Since 1990, the coordination problems in purchasing medical equipment have become worse due to the uncoordinated flow of equipment from western Europe facilitated by charity donations. Moreover, with the separation of the functions of payment for services conducted by the Statutory Health Insurance Fund and long-term investment planning, the problem of poor

coordination has worsened. For example, any "generous" standards concerning equipment stimulate a purchasing boom in health care institutions.

Although there are no queues for most hospital services, access to cardiac surgery, hip replacement and kidney transplantation is restricted by lack of funding. The financial deficit in the hospital sector has resulted in the unofficial but widespread practice whereby patients are asked to pay for medicines and disposable goods. A survey of hospitals conducted in 1995 indicated that about 30% of pharmaceuticals used in hospitals are in fact paid for by patients, though officially they are to be provided free of charge. The practice of under-thetable payments inherited from the Soviet period has been reduced in the outpatient sector, but it may have increased in the inpatient sector. As many as 40% of hospital inpatients report having paid money for services which are officially free of charge.

In addition to the above, the regulation of referrals and flow of information between primary and secondary care providers is poor. The feedback of clinical information from hospital back to the polyclinic is often inconsistent.

Certain attempts to limit the services of sanatoria which are covered by the health insurance system have been undertaken. The consequent reimbursement arrangements introduced are aimed at increasing the share of active rehabilitation services. The idea behind the change is to reduce public financing of leisure activities in spas.

Apart from revising payment arrangements, territorial sickness funds are trying to develop tools such as contractual arrangements (setting a ceiling on the volume of services to be produced per year) and improving the quality and appropriateness of services produced.

#### Social care

The Ministry of Social Welfare and Labour is the body responsible for social care policy development.

Up until 1990, the main focus of social care was institutional care for the elderly, and the physically and mentally disabled. During the last ten years the number and variety of public care institutions increased, nongovernmental care institutions appeared in the field and development of non-institutional forms of care started to receive attention as well.

In 1998, there were 29 nongovernmental care institutions for the elderly while public institutions taking care of elderly were subordinated to municipal and county administrations. A few county care homes housed 1771 people,

Table 13. Social care

	1995	1996	1997	1998	
Care institutions for elderly, total	64	70	80	90	
Residents in them	3 282	3 454	3 726	4 173	
Nursing homes for disabled adults, total	20	21	22	23	
Residents in them	4 365	4 678	4 832	4 942	
Infants' homes	6	6	6	6	
Inmates in them	479	516	510	506	
Boarding schools of general education	9	9	9	9	
Orphans and children without parental support in them	751	648	663	833	
Special boarding schools	53	55	57	55	
Orphans and children without parental support in them	968	965	928	831	
Care homes for disabled children	5	7	6	5	
Children in them	822	865	840	844	
Child care homes	46	49	57	64	
Children in them	3528	3587	3818	3905	
Child care groups centres	_	40	44	47	
Children in them	-	1227	1792	1876	
Families	36	39	46	39	
Foster-children	279	261	345	320	
Temporary child care homes	-	-	8	15	
Children in them	-	-	156	243	
Lodging-houses, total	10	11	13	15	
Lodgers per year	608	845	925	1089	

Source: Department of Statistics.

while 1701 elderly persons lived in 50 municipal care homes. The share of residents living in nongovernmental care institutions for the elderly doubled since 1995, accounting for 14% of the total number of persons in care institutions.

Of 4173 residents in institutions for the elderly, 76% were over 65 years old. About 30% of the residents in institutions for disabled adults are nursed intensively. About 30% of the costs of care are covered by user fees, with residents paying 80% of their retirement or disability pensions. The remaining costs are covered by state or municipal budgets.

The share of municipal child care homes has increased relative to the number of county child care homes. In 1998, almost one quarter of the total number of children in care (821 children) lived in 19 municipal child care homes. There are 17 nongovernmental child care homes, representing a four-fold increase since 1995 and housing 10% of children in care.

In view of the fact that a lot of admissions in rural or municipal hospitals were for nursing purposes, a network of nursing inpatient facilities started to

be formed, based mostly on existing small hospitals. Some social care is provided by the health care system. At the present time many social workers are employed by the nursing hospitals. In 1997 more than 30% of staff in social care institutions were medical personnel. Coordination of the two systems of care subordinated to two different ministries is still poor.

Community-based (non-institutional) social care is a new phenomenon in Lithuania. According to the Social Services Law adopted in 1996, municipalities have major responsibility for social services provision. Non-institutional home nursing, home assistance and housekeeping services are provided by carers and social workers in communities. In 1997 more than 2200 carers were involved in care delivery throughout the country but surely this is insufficient to meet the needs. In 1998, national budget expenditure for institutional care reached 209 million Litas while spending for home care services was only 9 million Litas. In spite of support by nongovernmental charities (for example, Caritas and the Red Cross), social care in the community remains an activity carried out mainly by families.

#### **Human resources and training**

About 6% of the total employed population are engaged in the health sector. According to Labour Exchange Data, the sector, particularly physicians, did not suffer significantly from unemployment during the downturn. According to labour force survey results, less than 4700 persons lost their jobs in the health sector since 1993, the vast majority of these being female auxiliaries living in urban areas (Labour Force, Employment and Unemployment 1977, Department of Statistics, Vilnius 1998).

The long-term upward trend in numbers of health care personnel ceased in 1990 (see Table 14 and Fig. 12). Since 1990 the number of persons employed in the health sector has changed only a little. In 1998 there were 3.9 physicians per 1000 population, only a little lower than the 4.0 physicians in 1996 and 1997. This is higher than in most other countries of the European Region (see Fig. 12 and Fig. 13). While there is a slightly declining trend in physician numbers per population, Table 14 shows graduating physicians to be rapidly increasing. This may be due to double counting of physicians in basic training and residency. If the double counting were eliminated, the data would likely show a small decrease in the number of medical students.

In the period 1990–1998, the numbers of feldshers, midwives and nurses have fallen more rapidly than numbers of physicians. Declining midwife numbers may be due to the fall in births which Lithuania has been experiencing

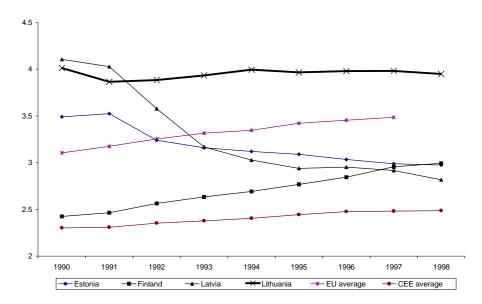


Fig. 12. Physicians per 1000 population in Lithuania and selected countries, 1990-1998

Table 14. Health care personnel, 1980-1998

Persons per 1000 population	1980	1985	1990	1995	1996	1997	1998	
Physicians	3.4	3.7	4.2	3.9	4.0	4.0	3.9	
Dentists	0.5	0.6	0.6	0.5	0.5	0.6	0.6	
Nurses*	10.9	12.2	8.1	7.8	7.8	7.7	7.6	
Feldshers	-	-	1.8	0.9	0.9	8.0	8.0	
Midwives	-	-	1.1	0.5	0.5	0.4	0.4	
Pharmacists	0.8	0.9	0.9	1.0	1.1	1.1	1.1	
Physicians graduating	0.1	0.1	0.1	0.1	0.2	0.4	0.4	
Nurses graduating	0.5	0.4	0.4	0.2	0.2	0.2	0.1	

Source: Department of Statistics.

(by roughly 25% since independence), while falling nurse numbers are due to cost containment measures which give rise more easily to nurse rather than physician lay-offs. The number of graduating nurses has been steadily falling since 1980; the decline is especially pronounced in the last decade.

<sup>\*</sup> Up to 1985 middle-level health personnel.

Italy (1997, 1989) 5.5 3.0 Spain (1997) 4.6 Norway 4.1 18.4 Belgium (1998,1996) 10.8 3.9 Greece (1995, 1992) 3.9 2.6 Israel 3.9 Germany 3.5 9.6 3.3 Iceland (1997) 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 Luxembourg 2.7 7.8 Malta (1998, 1993) 2.6 11.0 Netherlands (1990, 1991) 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 4.1 Bosnia and Herzegovina (1991) 4.7 Albania (1997) 3.7 Belarus 11.8 Georgia Russian Federation 4.2 8.2 Azerbaijan 3.6 7.7 Kazakhstan 3.5 6.5 Republic of Moldova 3.5 8.7 Armenia 3.2 4.8 Uzbekistan 3.1 10.1 Kyrgyzstan 7.5 3.0 Turkmenistan Ukraine 2.9 7.2 Tajikistan 2.0 4.8 5 10 20 25 15 Number per 1000 population

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

.A serious problem involves the unequal distribution of medical personnel throughout the country. While the density of physicians differs by a factor of 3, that of paramedical personnel differs by more than 5 times. However there is no consistent policy in dealing with the imbalances in the distribution of health care personnel in Lithuania.

Physicians are trained at the Kaunas Medical University and Vilnius University. In 1992 the formal training of physicians was extended to include residency training programmes following the six-year undergraduate training period.

The present programmes of medical training cover undergraduate and postgraduate levels as follows:

6 years	diploma
1 year	obligatory clinical practice for all physicians
2–4 years	residency training programmes in broad specialties
2–3 years	residency training programmes in narrow sub-
•	specialties.

Vocational (specialist) training of general practitioners, with a duration of 33 months, began in 1991 and retraining courses in general practice lasting up to 52 weeks for physicians started in 1993. The Ministry of Health plans to retrain the majority of general practitioners within the next ten years. However, the target to train over 2500 general practitioners by the year 2010 is unlikely to be reached as general practitioner training faces a number of problems. One problem involves the lack of teachers in the field. At present, general practitioners are mainly trained by internists, surgeons and gynaecologists. In addition, it is difficult for physicians already in practice to leave their jobs and families for retraining, and while the Government covers course costs, the financial burden of living expenses must be met by the physician's employer or the physician. Finally, newly trained general practitioners may experience difficulties in finding primary care posts, due to mismanagement and the opposition of traditionally-trained physicians.

There are six colleges for the training of nurses (paramedical personnel) in Lithuania. They are administered by the Ministry of Education, which together with the Ministry of Health, is responsible for curriculum development. The annual number of students is 3500 on average. Applicants must have completed 12 years of general school education, must pass an entrance examination and attend an interview. Students are trained as nurses and midwives as well as social workers. Training of feldshers stopped in 1998.

There are a number of ongoing changes in nurses' training. These changes stress health promotion activities and community care. There are also curriculum changes towards gaining more practical skills and increasing the role of qualified

nurses in training. Nurses are increasingly promoted as semi-independent health practitioners and formal training lasts 3.5 years. There is also a university degree programme at Kaunas Medical University with about 20 graduates per year. There is a nurses' retraining centre in Vilnius with a few local branches throughout the country.

Training used to be free (except textbooks and partially subsidized accommodation) for all students but since 1995 some students started to pay for medical residencies. The courses of retraining for both nurses and general practitioners are paid from the state budget through the Ministry of Health.

The increasing attention to the needs of the disabled and elderly has created a demand for more social workers. The formal training of specialists in this field has started at both university and college levels. Some are also selected from nursing or other staff. The fact that social workers' functions are as yet poorly defined remains the main obstacle to the development of this profession. This is partly because of tensions between the Ministry of Social Welfare and Labour, the Ministry of Health and municipalities.

The managers of health institutions are usually physicians, including all of Lithuania's hospital directors. As yet, there is no system for training managerial staff and the small number of residents trained as health administrators is insufficient to address this problem. Managerial training is not listed as a top priority by the Ministry of Health. Foreign donors (e.g. EU-PHARE or Denmark) appear to be more interested in the development of managerial skills. A few weeks' retraining courses for managers are provided in Vilnius University and Kaunas Medical University. A need for such training is increasing both due to the challenges managers face at the workplace and to the requirement to pass the attestation procedure recently introduced by the Ministry of Health.

According to the Medical Practice Law adopted in 1996, licensing of all medical professionals has been initiated. In parallel to the licensing process a complete register of health care professionals is being developed. A special Ministry of Health Commission is in charge of licensing health professionals working both in public and private sectors. Duration of initial licences for private providers is two years.

Foreigners who have received a permit for temporary residence in Lithuania are eligible for licensing as well. However the duration of the license is up to three months and the work is permitted only for charity or specialist training activities.

Salaries of public sector health personnel have traditionally been low in Lithuania, amounting to about 83% of the national average (February 1999). This situation helps explain not only the low morale of health personnel and

the existence of gratitude payments, but also the relatively slow introduction of labour-saving technologies in the health care sector.

Relatively low average wages can be partly explained by the dominance of female employees (more than 82% in 1998) who also in other sectors of the economy receive about 80% of male employees' average wages. However, since 1996 wages in the health sector have been increasing faster than the national average.

# Pharmaceuticals and health care technology assessment

Until 1990, this entire sector was state-owned. Medicines were subsidized by the state but there were constant shortages of even the simplest pharmaceuticals (for example contraceptives or vitamin preparations). In a survey conducted between 1989 and 1991, up to 75% of respondents saw the shortage of medications as the main problem facing the health sector. In 1991, a national essential drug list was approved which followed WHO recommendations. The main aim of this was to improve the supply of drugs and to reduce the cost of imports through discounts for bulk purchasing.

In 1991 Lithuania decided to harmonize its standards with those of western Europe, which favoured the opening of the Lithuanian market to more expensive, European Union-produced drugs. At the same time, it prohibited cheaper imports from the former USSR as these did not meet European standards. The privatization of supply and delivery of pharmaceuticals has been stimulated by a growing market, but this has also tended to favour more expensive medications. Prescribers have not been prepared for the wide range of new products available and have been susceptible to marketing techniques. Overall this has led to an improved supply of drugs but expenditure on pharmaceuticals has risen sharply and now stands at least at 30% of total health care expenditure.

The registration of drugs is the responsibility of the State Pharmaceuticals Control Agency which is an agency of the Ministry of Health. Its principal aim is to ensure quality standards. Following registration, the applicant must apply for the retail price of the pharmaceutical to be fixed. The Law on Pharmaceutical Activities requires the government to fix this price. This function has been delegated to the Ministry of Health. The price is based on the production price, multiplied by a certain index. For more expensive pharmaceuticals, the margin allowed is reduced (and hence the index for multiplication is reduced).

Drugs are delivered free to the inpatient sector, but the reimbursement system for drugs prescribed in the outpatient sector is complicated. In order to receive

reimbursement of pharmaceutical costs, patients must meet certain eligibility criteria. This means in practice that up to 60% of the population pay the full cost. Only prescribed drugs are reimbursed and reimbursement is only up to the reference price (i.e. an average cost of all the generic versions). Generic drugs are included in the positive list. As indicated by population surveys, the burden of out-of-pocket expenditures for pharmaceuticals, which increased more than two-fold since 1995, has become a serious concern.

Until 1997, no institution apart from SODRA had expressed a willingness to promote the rationalization of drug consumption. When responsibilities for reimbursement of pharmaceuticals were passed from SODRA to the Statutory Health Insurance Fund (SHIF), the health sector finally started to recognize the magnitude of the problem. During 1998 the SHIF was unable to curb an increase in spending (actual reimbursement exceeded budget estimates by almost 40%). The first steps undertaken by territorial sickness funds to address the problem involved the introduction of accurate information systems in order to control the process of reimbursement. However, until now there is no well developed strategy of cost containment in the pharmaceutical sector. As the lobbying power of the pharmaceutical industry is great and pharmacies have little interest in cost-containment, reduction in expenditure on pharmaceuticals is likely to be a long and difficult process.

According to statements appearing in the Government Programme (a general policy document prepared by the Cabinet of Ministers and approved by Parliament) for the period 1997–2000, growth in domestic production of pharmaceuticals is a priority. Currently, of 5400 pharmaceuticals registered in the country just 419 are produced by domestic manufacturers and they account for only 4% of the market in monetary terms.

Regional access to pharmaceuticals has also become a subject of concern. In spite of a large number of chemists' shops (in 1998 there were 970 chemists' shops in Lithuania) and a wide choice of pharmacies in cities, people living in rural areas face difficulties in purchasing drugs. In response to this problem the Ministry of Health has implemented a policy to ensure the adequate supply of pharmaceuticals through the primary health care centres.

There is no systematic assessment of efficient, cost-effective and affordable new technologies. Providers of highly specialized care such as heart surgery or neuro-surgery are lobbied by the manufacturers to purchase high technology equipment, for example, CT scanners, angiographs or sophisticated ultrasound equipment. This results in a reduction of funds for more effective investment programmes and an increased deficit in health care spending. Since 1990, the coordination problems in purchasing medical equipment have become worse due to the uncoordinated flow of equipment from western Europe, facilitated by charity donations.

### Financial resource allocation

#### Third-party budget setting and resource allocation

Intil the implementation of the Health Insurance Law in 1997 resource allocation was largely determined by historical criteria. Central funds were allocated to municipalities on the basis of population and historical expenditure. The municipalities in turn allocated resources to facilities mainly in relation to historical spending (see the financing flow chart appearing in Fig.14). This is explained in the section on health care finance and expenditure.

Since 1997 the policy of resource allocation has changed radically. Primary health care is financed on a per capita basis with some bonuses paid to PHC institutions serving the rural population. Current expenditures of specialized outpatient as well as inpatient care are 100% financed according to the services provided. There were no limits to services reimbursed by health insurance in 1997 and 1998. In 1999, certain limits in the volume of services that can be reimbursed by the territorial sickness funds have begun to be introduced, however it is as yet unclear how this will develop in the future. Reforms still do not imply more equal or more needs-related regional allocation (regions with a better developed institutional network provide more services and attract more public resources) but the reforms have created more incentives to increase productivity in the sector. It is likely that certain initiatives toward needs-based regional allocation will be undertaken in 2000–2001 in cooperation with the World Bank.

### Payment of hospitals

Lithuania inherited a system of global budgets from the Soviet period. Health care institutions were budgeted largely on the basis of numbers of beds and numbers of medical and nursing staff in each institution. Since 1990, however, numerous changes have taken place.

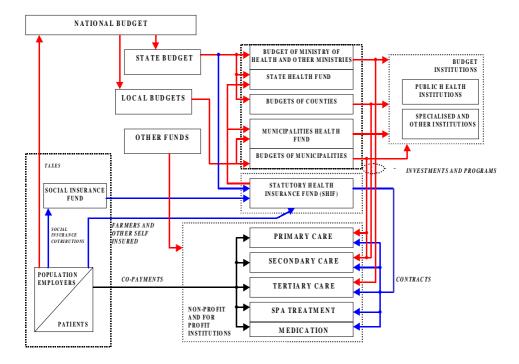


Fig. 14. Financing flow chart

In the period 1994–1997 while the national health insurance scheme was being piloted, recurrent expenditures of all republican health institutions (40% of the hospital bed capacity in the country) were financed by the State Sickness Fund on the basis of annual contracts. Payments were on the basis of cost per case, with cases classified according to 50 groups of diagnoses based on 17 groups in ICD-9. The number of cases treated was agreed between the health facility and the State Sickness Fund. The price per case was fixed by the Ministry of Health, and was applied uniformly throughout the country. An adjustment was made for the higher cost of treatment in university hospitals. The price per case was based on a cost per day multiplied by a normative length of stay for each diagnosis. Norms on length of stay were based on the average length of stay during the last three years.

The State Sickness Fund paid in advance at the beginning of each year in accordance with the contract. Indeed, the main goal of the contract was to create a basis for advance payments. Each quarter the hospital had to present an activity report indicating the number of cases it had treated. After approval of the report, the State Sickness Fund adjusted payments according to the volume of services provided by the hospital, with proportional increases or deductions

for higher or lower activity levels. There was a ceiling on the total payments by the fund. If all the institutions increased their volume of services, the prices per case were proportionately reduced in order to balance the State Sickness Fund budget. This reform had been supported by the Ministry of Health and by hospital managers (in a survey in the autumn of 1995, 85% of republican hospital directors described the reform as definite progress) as well as the general public, leading to implementation of the full scale health insurance scheme in 1997.

Until 1997 municipal hospitals with polyclinics as departments of these hospitals were financed on the basis of global budgets calculated by mixed formulae. Both the number of inputs (staff and hospital beds) and population covered were taken into account in calculating the budget, but the first factor was far more important than the second. As a group, therefore, municipal hospitals were characterized as having few incentives to increase productivity and sometimes a rather low threshold for referring patients to university hospitals.

The Health Insurance Law proposed unification of payments for acute health care in the spring of 1996, based on cost-per-case payments, with prices fixed by agreement between the Ministry of Health and the State Sickness Fund on a national level. Nationwide discussions concerning the precise form of reimbursement took place in autumn 1996.

Reimbursement of inpatient services is now similar to the pattern of republican hospital financing in the period 1994–1997. Currently all hospitals are financed in the same way. Competition among health care providers is promoted through free patient choice of institutional provider. As of 1997, there are ten territorial sickness funds (TSFs) that are respective contractors of services for residents of their county (*apskritis*). In 1997–1998 budgets of hospitals were open-ended (no limits of services provision were imposed by contracts between hospitals and statutory health insurance funds). This, as well as incentives to refer from the primary to the secondary level of care (to be explained in the section that follows) resulted in a sharp increase of hospital admissions from a historically steady rate of about 20 per 100 population to about 24 in 1998. In order to put an end to increasing admissions, ceilings to services provided were introduced into contracts between hospitals and the TSFs in 1999, and some additional cost-containment measures are under way (to be implemented probably after the general elections in autumn of 2000).

Secondary outpatient services are reimbursed (if a referral has been made by a primary health care physician) mainly on a per case basis. The case is defined as all visits to a specialist related to the same illness and is called a consultation. Almost all recurrent costs of outpatient institutions, including the majority of laboratory tests, are covered by the price of the consultation. The system has increased productivity of specialists by contributing to a decrease in waiting time of patients. Some problems related to this remuneration method are of concern. First, there is just one price for all consultations and it is unclear if administrative savings compensate for losses related to such an untargeted system. Second, as additional efforts of physicians are not reimbursed, the system creates incentives to reduce their inputs and to refer patients to a hospital. There are no precise plans on how to mitigate the shortcomings of the current system. Changes may occur in the year 2000 or 2001.

Long-term or nursing hospitals are reimbursed on a bed-day basis. Patients may be treated in these hospitals up to 120 days and later should be transferred to homes for the elderly. There is a co-payment for services in the latter institutions. In addition to radical changes in the form of financing from a line budget system to a system where revenues of health care institutions mainly depend on services provided, financial management of public providers was also liberalized. Since 1997, based on the Health Care Institutions Law, public health care institutions are registered as non-profit legal entities. The administration of these non-profit institutions is free to decide on internal expenditure structure as well wage policy (following agreement with trade unions).

#### Payment of physicians

Up to 90% of physicians are employed in public hospitals and polyclinics on a salaried basis. As explained earlier, incomes are not high. Prior to the implementation of the Health Insurance Law (1996) and Health Care Institutions Law (1996), in order to introduce some incentives to improve quality of care, the Ministry of Health had differentiated salaries by four levels of qualification. In addition, health care facilities had the right to pay unlimited bonuses to their doctors.

Since 1997 nationwide regulation of salaries occurs only for public health personnel (i.e. personnel not involved with health care services provision). By contrast, in personal health services provision each individual health care institution may agree on its wage policy in the frame of collective bargaining (with the exception of the minimum wage which is set by the Government and is the same for all sectors of the economy). The National Chamber of Physicians has some voice in bargaining as well.

Since 1991, public institutions have been allowed to introduce internal payment systems based on elements of fee-for-service or capitation. In Siauliai

(Lithuania's fourth largest city) a capitation method was used to pay primary care physicians, while the fee-for-service method was used in about 10% of polyclinics in the country even before the implementation of health insurance. Currently about 50% of outpatient institutions have introduced elements of fee-for-service or capitation. Still, salaries remain the key component of incomes as in most institutions that have introduced elements of fee-for-service, salaries account for about 70% of physicians' income.

Before the health insurance reform was implemented there had been no significant practical steps toward reforming the remuneration system of outpatient services although a lot of thinking had gone into this issue. Between 1990 and 1993 a majority of decision-makers were in favour of adopting feefor-service remuneration for at least outpatient services and inpatient surgery. A number of arguments were used to support this view. There was a perceived need to increase physicians' productivity, to improve attention to the patient, to reduce under-the-table payments and to increase doctors' job satisfaction. At the same time, however, the economic recession which was accompanied by greatly reduced public health expenditures argued in favour of financial affordability considerations. The rising acceptance of health promotion and health education emphasized the risks associated with overestimating the benefits of simply maximising the volume of medical services. Alongside this, aims to promote the general practitioner as gatekeeper and to reduce overspecialization in the outpatient sector would not be supported by implementation of a sophisticated fee-for-service system. Therefore in the beginning of 1996 the Ministry of Health, the State Sickness Fund and the Chamber of Physicians agreed on a mixed formula for payment of physicians. Basic medical services provided by general practitioners would be remunerated by a capitation method (accounting for up to 70% of income) and those services on an additional list by a fee-for-service method. Several criteria were specified, on the basis of which a service could be included in this additional list: the service should substitute for an inpatient service and decrease total treatment costs for a particular illness; it should involve the provision of certain priority services such as immunization of children or outpatient care for certain high-risk groups; or it must be a service that would not otherwise be provided by the majority of outpatient institutions. (EU-PHARE experts had also provided proposals for implementation of this reform in 1996.)

Nationwide discussions concerning the precise form of reimbursement took place in autumn 1996. At that time because of the associated high administrative costs it was decided not to rely on an extensive fee-for-service system in the outpatient sector. Therefore the system of reimbursement described above was not implemented. Reimbursement of primary health care institutions

was based rather on the number of registered insured on an age-adjusted basis. All recurrent costs of services covered by statutory health insurance and provided by primary health care institutions including routine laboratory tests are currently covered by these capitation payments. This reimbursement system, with its very low administrative costs, equalized primary health care financing all over the country, but on the other hand, it created very few incentives for productivity increases. In most municipalities there is just one PHC centre and these "natural monopolies" are interested in referring patients to hospitals even in only slightly complicated cases.

The Ministry of Health and the State Sickness Fund are therefore now planning to introduce certain explicit financial incentives for primary health care institutions in the form of special bonus payments and fee-for-service elements. These incentives are intended to cover the following:

- health promotion and health prevention activities (e.g. bonus payments for meeting of national immunization and screening standards);
- provision of services that currently are provided by specialists in the outpatient sector or even hospitals (if according to international practice these services are efficiently provided by general practitioners).

Implementation of these measures is planned to start in 2000. After the reform, capitation should cover about 70% of primary health care revenues. The new system is very similar to that which had been agreed upon in the spring of 1996.

## Health care reforms

## Aims and objectives

In 1991 a consumer survey revealed that only 7% of respondents were satisfied with the health sector's performance. At the same time, 80% expressed a desire for reforms. There were a number of criticisms of the previous health system. Despite having twice the average number of physicians per capita for Europe as a whole, there were problems of access to medical services. There were few incentives to deliver services of an adequate quality or even to deliver sufficient services. Unofficial payments were common and may have accounted for as much as 10% of total expenditure on health care. There were permanent shortages of drugs and the health sector was overmedicalized with too little attention paid to primary health care or health promotion. Medical professionals' salaries were low (below the average industrial wage) and private practice was not allowed. Alongside this, there were inequities in service provision, with special health services for the "nomenklatura" and for workers in certain industries.

Some of the shortcomings of the former system have been addressed since the restoration of independence. Medical facilities previously reserved for special groups have been opened to the public in 1990–1991, drug shortages have disappeared in 1993–1994 as pharmaceutical markets were liberalized and most of pharmaceutical trade privatized . At the same time, however, economic recession has drawn attention to some of the more serious structural defects in the system. The population's health status was declining until 1994 with the fall in standards of living, worsening diet and increased consumption of alcohol. There have also been problems maintaining health planning and medical audit procedures during a time of change.

The health care reforms in Lithuania can be seen as an interaction between efforts to change the Soviet health system and to adapt the health system to a rapidly changing social environment.

The reforms have a number of key aims. The first of these is to implement an active health policy. This means that instead of relying on strategies which forced medical services to deal with addressing the consequences of illnesses, there should be more emphasis on prevention including the development of healthy lifestyles, health promotion and health education of the general public. A second aim is to restructure the health services so that they are oriented towards primary health care development and implementation of a general practitioner gatekeeping function. In parallel with this would be a decrease in the role of the hospital sector, with substitution of inpatient services by outpatient care and social care. The third aim of reforms is to increase the productivity of providers of health services and to increase their orientation towards patients' needs through the implementation of a health insurance scheme. Finally it is hoped to introduce a more democratic model of decision-making, by increasing the role of municipalities and districts, medical professionals, patients and the general public.

## Content of reforms and legislation

1988

Public debate over the transformation of the Semashko system started tackling the general policy issues:

- shifting from general taxation towards contribution based financing;
- implementing the principle that money should follow the patient;
- making public administration of the health sector in Lithuania independent of that of the Soviet Union;
- · abolishing management according to budget lines.

11 March 1990

Independence of Lithuania declared by the Lithuanian Parliament.

1991

Law on Pharmacies approved, defining procedures for funding pharmacies, and registration and pricing of drugs.

May 1991

Law on Social Insurance approved, starting nationwide development of statutory social insurance:

• introduction of social insurance contributions including 3% of the payroll tax allocated to health care benefits and about 2% allocated to sick leave benefits;

- inclusion into the new scheme of a number of healthrelated benefits (reimbursement of drug costs and spa treatment);
- National Social Insurance Agency (SODRA) with local offices in every municipality was founded.

October 1991

The Lithuanian National Health Concept was approved by Parliament, expressing the State's political will to:

- implement an active health policy, that is, reorient policy towards primary health care and prevention;
- introduce health care financing reform by creating a system incorporating general taxation and health insurance contributions.

1991

Decentralization of public health care administration:

- municipalities became owners of primary health care institutions and the majority of secondary level ones;
- public financing of these institutions shifted to municipal budgets.

1992

Reform of university medical training.

1992

State Sickness Fund (SSF) was founded by Government Decree

- open-ended contracting of tertiary care hospitals by SSF started;
- case payment system for these hospitals (per hospitalization) was introduced.

March 1993

National Conference on Health Policy.

1993-1996

Health Care Reform Management Board (a Ministry of Health advisory body responsible for promotion of the reforms) was established.

1992-1995

Public debate on structure and functions of future health financing and administration system.

July 1994

Law of the Health System approved, creating the legal framework for health policy and generally defining the role of administrative public bodies.

July 1995

Law on Psychiatric Health.

October 1995

Law on Alcohol Control.

January 1996

Law on Tobacco Control.

April 1996

Law on Dental Care.

May 1996

Health Insurance Law (HIL) approved, declaring the start of nationwide reform of health care financing as of 1 January 1997:

- all residents of Lithuania should be insured;
- health insurance financing is to be composed of a mixture of health insurance contributions and transfers from the state budget;
- territorial sickness funds (TSF) as regional branches with supervisory board in each county (apskritis) should be established:
- providers of acute care should be reimbursed through contracts with TSFs according to nationally fixed prices for services provided.

June 1996

Health Care Institution Law (HCIL) approved.

- provides for more rights and responsibilities of public health care institutions;
- supervisory boards must be created.

June 1996

Law on Prevention and Control of Communicable Diseases

September 1996

Law on Physician Practice introduced the framework for medical profession licensing.

October 1996

Patients' Rights Law.

January 1997

Partial implementation of statutory health insurance by establishing health insurance budget as independent from the national budget.

May 1997

- Majority of by-laws related to Health Insurance Law approved, more then 50% of residents become registered with primary health care institutions. Staffing TSF's is ongoing;
- Law on Patient Rights, which was signed in October 1996, came into effect.

March 1997

Law on Medical Care against Narcotic Addiction.

July 1997

Contracting of providers by TSFs started.

October 1997

Contract-based financing of health care institutions began nationwide. Pure capitation is used for reimbursing primary health care and case payment systems for secondary care.

Autumn 1997	Public health care institutions reorganized as non-profit public institutions according to the requirements of the Health Care Institution Law (1996).
January 1998	International accounting principles were introduced in non-profit public institutions.
March 1998	Internal monitoring system in statutory health insurance scheme introduced.
May 1998	• National conference on supplementary health insurance organized approving certain guidelines in the field;
	<ul> <li>Procedures for compensation of consequences of malpractice came into force.</li> </ul>
June 1998	National Board of Health established.
July 1998	Lithuanian Health Programme setting 10-year guidelines for health care system development approved.
March 1999	Occupational Health Law.
Autumn 1998	National guidelines concerning future statutory health insurance development are agreed by State Sickness Fund and Ministry of Health:
	<ul> <li>risk adjusted resource allocation formula;</li> </ul>
	<ul> <li>partial disaggregation of case-based reimbursement system;</li> </ul>
	• implementation of internal quality control mechanisms (e.g. treatment protocols in institutions) Medical audit regulation approved.
December 1998	Presentation of the annual report of the National Health Board in Parliament including the assessment of results achieved during the health insurance reform.
May 1999	National conference on hospitals restructuring is organized.

#### Health for all policy

An action plan for 1996 to 1997 was produced by the Ministry of Health. This summarized the main activities to be undertaken in implementing health for all and identified who was to be responsible for these. The National Health Programme approved by the parliament in the summer of 1998 is a step in the same direction.

## Reform implementation

Broadly speaking, the legal framework of the reforms had been designed by 1996. Most of reform related legislation was adopted by the parliament (Seimas) in the period 1995–1997. The basic structure of the reformed health care system is for the most part already in place (e.g. statutory health insurance agencies were founded in 1996-1997). At the present time issues regarding the strengthening of new capacities as well as fine-tuning of administrative and financial tools installed are of importance. Some of the practical results of the reforms can be seen and are discussed in each of the relevant sections of this document. It is important to note that there is a high degree of consensus among the different political parties on the objectives of the health care reform as well as the importance of continuing with the measures that have been undertaken to date. There have been a number of attempts to engage in ongoing discussions on health reforms. A National Conference on Health Policy was organized with the support of WHO in the spring of 1993. UNDP helped run the National Consensus Conference on Primary Health Care in summer 1995, and was followed by similar regional primary health care conferences. In the autumn of 1995, a National Conference on Health Care Decentralization was organized with the support of an EU-PHARE project. The second National Health Policy Conference took place in April 1997 with international backing (WHO, EU) at which the National Health Programme was approved.

A national conference organized in Parliament made certain assessments of reforms in late 1998. Achievements in health care that were stressed included improvements in medical training, increased productivity of health care institutions, democratization of the decision-making process, as well as improvements in health status of the population. On the other hand certain concerns were expressed in relation to an increase in hospital admissions, shortcomings in intersectoral cooperation, and unsolved problems in the areas of public health and lifestyles of the population.

Aside from the discussions on health care reform, a number of primary health care pilot projects have started in three municipalities. Four medical facilities have been selected to pilot the development of health service cost accounting and remuneration systems. EU/PHARE, Denmark and Sweden have contributed to this process.

The public today express greater interest in health policy development than a few years ago, which allows room for optimism. According to surveys of public opinion the population is in general positive towards the health sector. Nevertheless, there are still weaknesses in the health care sector which may

threaten the reform process. Nongovernmental organizations and professional organizations remain relatively weak and the university medical faculties show little interest in health policy analysis. As a result the Ministry of Health remains the dominant force in health policy design, which leaves the process vulnerable to changes in government or even changes of the Minister of Health. Even though some improvements in public administration have been achieved (improvement of managerial capacities of staff in health insurance companies is an example), the Ministry of Health and particularly municipal staff lack skills in managing change. The tradition of changing the top civil servants along with changes of minister does not allow for skills to be acquired over time. The salaries of civil servants are currently compatible with those in the private sector, but job security of civil servants is still of concern. These facts contribute to the predominance of short-term thinking in decision-making and to the persistence of a gap between the comprehensive reform strategy on the one hand and underdeveloped patterns of strategy implementation on the other.

## **Conclusions**

he Republic of Lithuania inherited a model of health care provision typical for the former USSR. This was over-centralized, had little room for patient choice or respect for patients' rights. There were too many beds, shortages of drugs and little attention to primary and social care. In the health sector, wages and morale were often low. On the other hand, medical facilities were quite evenly distributed throughout the country, public transport was relatively well developed and financial barriers to health services (even including under-the-table payments) were low. Basic vaccinations covered the whole population and communicable diseases were adequately controlled. In term of health status, the country compared favourably with the rest of the USSR.

Reforms in Lithuania were motivated by a desire to deal with a number of specific problems as well as to address issues of equity, health gain, consumer choice and quality of care. In general, reforms have been embarked on with caution as it was decided from the outset that radical health reform should follow structural reforms in the industrial and financial sectors. This gradual approach, particularly during the early 1990s helped maintain political and social stability in the country during a time of severe economic crisis.

Although it is acknowledged that there were significant unofficial out-of-pocket payments under the previous system, the financial burden was relatively equitably distributed, being tax-financed. Much of this equity in financing has been preserved, even as financing since 1997 has progressively switched to a statutory health insurance system based on contributions. This has been due to the compromize agreement to finance the statutory health insurance system through a combination of insurance contributions and tax revenues, with a larger share of the latter. While there are co-payments on pharmaceuticals, there is evidence that unofficial payments are declining due to the new financing mechanisms and new models of provision. Moreover, opening parallel health care systems to all citizens has eliminated an additional source of inequity, and

access to health care services has increased. However difficulties still remain in connection with inequities in regional allocations of resources. In addition, there are indications that private expenditures on health care are on the rise.

The effects of the reforms on efficiency appear to be mixed. Lithuania historically has had a large number of hospital beds per capita and one of the highest numbers of doctors per capita in Europe. Both of these show declining trends, although the decline in student numbers has only been slight. Average length of stay in hospitals has been substantially reduced as a result of the introduction of new payment methods, and occupancy rates have increased, however admissions per population are on the rise. The new referral system does not appear to have helped much in this respect (partly because it is not always observed), and the capitation system used for primary health care remuneration seems to have created incentives for supplier-induced demand for hospital services. However the new system of remuneration to be implemented in 2000 proposes to deal with this problem. In addition, efforts are being made to direct services provisions toward primary health care.

Improved health status is one of the most positive developments of recent years. In the early years of independence there had been a deterioration, marked by reduced life expectancy. Since 1995, alongside an economic recovery as well as certain improvements in public administration, the health status of the population has once again begun to improve. In 1998 life expectancy at birth exceeded the highest figures ever achieved in the pre-reform period.

In the area of patient choice, a number of improvements have occurred. All citizens are free to choose their primary health care institution and primary health care physician within that institution, and are also free to change physician once a year. The national period of registration began in 1997, and 90% of the population was registered with a primary health care provider within one year of implementation. In addition, patients are free to choose their hospital provider, thereby encouraging competition between hospitals. There has also been some democratization of decision-making processes with greater participation of the general public through increased representation in decision-making bodies. However there is still substantial room for progress. Despite increasing cooperation between administrators, providers and consumers, consumers remain in a relatively weak position.

The Lithuanian health care system has managed to remain stable at a time of considerable social and economic upheaval. Universal coverage has been maintained, and there have been successes with respect to infant mortality, drug supplies, and increasing public involvement in the health care system. Nevertheless high fixed costs, due to large numbers of physicians and hospital beds, are competing with relatively low levels of funding. This situation is

aggravated by the relatively high proportion of expenditure on pharmaceuticals. On the other hand the economic revival of recent years has permitted health care expenditures to increase, and reform momentum has picked up with the implementation of the new statutory health insurance system and efforts to develop the institutional and legal capacity necessary to make the health care system envisaged fully functional.

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