

## HiT summary Russian Federation

## Introduction

## Government and recent political history

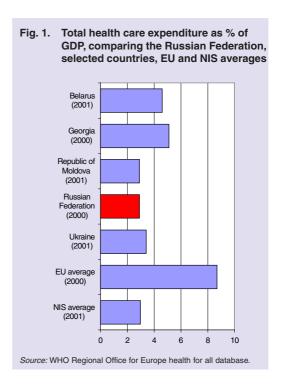
The Russian Federation declared its independence on 12 June 1990, and according to its constitution of 1993, is a federal democratic republic. Governing powers rest with the president, who is head of state and is elected every four years, and the parliament (Federal Assembly), which consists of two chambers: the State Duma, which proposes and adopts laws, and the Federal Council, which approves them.

## **Population**

The population was estimated to be 144.8 million in April 2001, and has been declining since 1992 due to a greater number of deaths than births. About 40% of the natural population decrease is made up by a positive migratory balance with the former Soviet republics. The population is ageing, as the proportion of the population under 15 years old fell from 22.9 in 1991 to 19% in 1999, and the proportion over 64 increased from 10.2% to 12.5%. Economic decline following independence has had a major impact on living standards: in 1999, 29% of the population was living on incomes lower than the subsistence minimum.

### Average life expectancy

Life expectancy is among the lowest in Europe, particularly that of men, which has fluctuated substantially in the past 15 years, from a high of 61.4 in 1998, to 58.5 in 2001. Female life expectancy has been relatively more stable, and stood at 72.1 in 2001. These indicators, however, mask enormous inter-regional differences: life expectancy (both male plus female) varies by as many as 16 years across regions.



### Leading causes of death

The main causes of death are diseases of the circulatory system, giving rise to the highest mortality rates in the European Region, followed by external causes of injury and poisoning, also with the highest mortality rates in the European Region. It is widely believed that both these causes of death are related to alcohol abuse. Maternal mortality (39.7 per 100 000 live births

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in 2000) is one of the highest in Europe, though it has been steadily falling. By contrast, infant mortality (at 16–20 per 1000 live births) is one of the lowest in the NIS, though it is significantly higher than in western European countries.

## Recent history of the health care system

During the Soviet period the health care system was organized on the Semashko principles. From the mid-1980s there began a quest for new organizational and financing methods to improve efficiency and quality in health care services. This resulted in the New Economic Mechanism (1987–1991) of financing methods – introduced in St. Petersburg, Kemorovo and Samara providing greater flexibility and control of financial resources by health system managers, as well as innovative financing mechanisms. The success of these experiments encouraged other regions to attempt to replicate them, however the economic collapse of 1991 signaled the end of the New Economic Mechanism. Following independence, concern over the widespread inefficiencies of the health care system and the need to confront its severe funding shortage prompted a radical reform centered mainly on financing.

#### Reform trends

Much of the impetus for reform centered on issues of funding, efficiency and decentralization. The keystone of the reform, the introduction of national, mandatory health insurance to supplement tax-based funding, was intended to link all three. Health insurance legislation of 1991, revised in 1993, established the health insurance system. In addition, the Ministry of Health has supported reforms in the training of general practitioners, the autonomy of hospital and polyclinic managers, the payment of staff and planning and regulation. The intention has been to combine a range of measures to overturn the effects of years of rigid bureaucratic control by decentralizing management and financial responsibilities, improving the economic rationale of medical decision-making, and encouraging greater efficiency and responsiveness to citizens' needs.

## Health expenditure and GDP

Estimates of health care spending as a share of GDP vary widely. According to the WHO Regional Office for Europe health for all database this was 2.9% in 2000; however, inclusion of estimates of private (official plus unofficial) spending, and spending by the parallel health care system would bring this share to as much as 6.5% to 7% of GDP.

## **Overview**

Far-reaching and diverse health care reforms were undertaken at a time of great upheaval and in response to pressing demands. There has been a major decentralization of power with the consequent withdrawal of the Ministry of Health from planning, regulation and management. There is considerable evidence, however, that not all regions and districts are able to meet the responsibilities devolved to them, with a further danger that the health care system may collapse into numerous segmented systems. The health care financing reform was a very ambitious effort to overhaul the previous system, and the extent to which the mechanisms foreseen by legislation have actually come into being varies widely from region to region. A major unresolved problem is the unrealistic level of state commitments to health care benefits in view of dire financial constraints faced by budgetary and health insurance funding sources. The assumption at the outset was that the efficiency savings resulting from the reform process would be sufficient to cover the costs of the minimum benefit requirements, but this has not been the case. On a positive note, the reforms have helped generate a sense of accountability and cost-consciousness among many entities and professionals, along with the acquisition of new financial, managerial and administrative skills.

# Organizational structure and management

The Russian Federation is divided into three administrative levels – federal, regional and municipal – and the health care system is organized accordingly. The Ministry of Health at the federal level is the central policy formulating body and retains nominal rights to oversee the work and decisions devolved to the regions. However, with the growth of the regions' power, the Ministry no longer expects to command compliance. Provision at this level includes highly specialized medical institutions providing tertiary care, and a number of federally targeted programs (diabetes, tuberculosis, etc.).

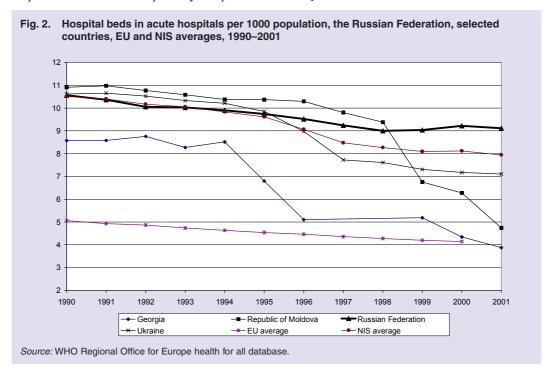
Regional governments enjoy considerable autonomy: they oversee regional level facilities including general hospitals, paediatric hospitals, specialized medical institutions for infectious diseases, mental illness and others, as well as about a quarter of dispensaries and 70% of diagnostic centres. Urban municipalities are responsible for a multi-specialty hospital for

adults, a paediatric hospital, emergency care hospitals, and specialized hospitals, as well as most polyclinics and dispensaries. Rural municipalities typically have a central hospital with a polyclinic, independent polyclinics, and ambulatories.

The parallel system accounts for about 15% of all outpatient facilities and about 6% of inpatient facilities. There is now access to many of these services on a private basis.

The Russian Academy of Medical Sciences is independent of the Ministry of Health and is responsible for medical research, upholding the tradition of separating the practice of medical science and research from medical education.

The compulsory health insurance system introduced in 1993 created a purchaser-provider split through the establishment of a federal Mandatory Health Insurance Fund and territorial Mandatory Health Insurance Funds (one in each region of the Russian Federation). The federal fund is responsible for supervising and regulating the 89 territorial funds, as well as implementing an equalization mechanism. The territorial funds



are responsible for accumulating contributions and implementing the program of state benefits.

Another key feature of the health insurance system is insurance organizations which are independent third party payers, receiving their financing from territorial funds, and purchasing health care services from providers on behalf of their subscribers.

The private sector has yet to develop to a significant extent, with the exception of the areas of pharmaceutical supplies, dentistry and ophthalmology.

# Health care finance and expenditure

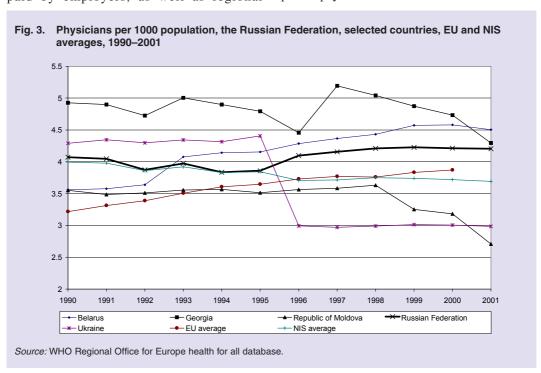
## Main system of finance

The health care system is financed through a mix of compulsory health insurance and tax funds. Health insurance is funded by a 3.6% payroll tax paid by employers, as well as regional

government contributions on behalf of the nonworking population (children, the unemployed, pensioners, etc.). These insurance contributions are distributed to the insurance organizations which then contract with providers for care on behalf of their members.

Tax funds come from the federal and regional budgets. The federal budget contribution to health care financing is small and declining, amounting to just under 5% of total health care financing in 1999. Federal financing is directed toward training, research, public health activities, large investments and tertiary care. The regional budgets contribute about 45% of total health care financing; of this only a small share (about 5% in 1999) goes toward paying the insurance contributions of the non-working population, while the bulk of this funding is directed toward paying for services directly.

The insurance contributions paid by employers for the working population amount to about 16% of total financing, and the remainder, or roughly 34% of financing is from out-of-pocket payments.



These nation-wide figures mask huge disparities among regions in financing arrangements, particularly in the degree to which regions agree to make payments on behalf of their non-working populations, or else pay for health care services directly as in the pre-reform system.

## Complementary sources of finance

There are no officially sanctioned measures for cost-sharing; the only legally permissible charges are for outpatient drugs, most medical aids and prostheses, dental care, routine ophthalmologic services, and services excluded from the basic package ("non-essential" services). The significant increase in out-of-pocket payments in recent years, however, is in part due to increased pharmaceutical costs, and in part due to patients' need to cover that portion of costs the statutory funds are unable to cover. Providers of nominally free services, unable to cover their costs through public funds, charge for services they are legally required to provide free of charge. The government, unable to provide the necessary financing, is forced to accept these legally questionable practices. In addition, the practice of illegal "envelope" payments to health care staff is believed to be very widespread.

### Health care benefits and rationing

The guarantee of a full range of free health care services has not changed with independence, but rather has been confirmed through the new Russian constitution and the health insurance financing legislation. A first major step taken by the federal government to review its commitment to free health care occurred in 1998 with the development of the Guaranteed Package Program. This does not actually change the benefits structure, but does attempt to provide tools for bringing the commitments into balance with the available resources. The objective is to specify the total funds required to meet the costs of providing free health care services, as well as to determine how the funds will be collected and disbursed. In addition, it is intended to be used as a restructuring tool that will encourage the development of primary care services at the expense of secondary care. To date, however, only a few of the regions have tried to use this as a restructuring element, and outcomes in the regions tend to reflect political circumstances.

## Health care expenditure

The 2.9% figure of health care spending as a share of GDP provided by the WHO Regional Office for Europe health for all database is a considerable underestimate of actual health care spending. More realistic estimates which take into account the full range of out-of-pocket payments as well as spending by the parallel health care system would put this figure closer to 6.5% to 7%.

## Health care delivery system

## **Primary care services**

The structure of health care services has not changed substantially since the Soviet era. First contact health care providers take a number of forms:

In rural areas, health posts or *feldsher* midwife stations cover a population of about 4000 and offer immunization, basic health checks and routine examinations as well as prenatal and newborn care. Health centres cover larger rural populations (about 7000), and offer a range of primary care services including immunization, screening, treatment of minor ailments and supervision of chronic conditions.

In urban areas, polyclinics house a number of therapeutists and auxiliary staff providing a range of general practice. In addition, they tend to employ a small number of specialists providing secondary outpatient care (though the boundaries between primary and secondary care tend to be blurred). Urban areas additionally provide urban dispensaries offering care equivalent to that of the rural health posts, specialized polyclinics for paediatric or gynaecological and obstetric services, and finally enterprise or work-based polyclinics.

Most doctors in primary care today qualified in the Soviet era and tend to be associated with the negative image of primary medicine. The introduction of a three-year post graduate training program for general practitioners in 1992 was a first step in developing a strong primary care system, and is expected to raise standards and enhance public confidence. In support of primary care based on general/family practice, a Ministry of Health order in 2000 defined training requirements, rights and obligations of general practitioners, and specified the legal, organizational and financial mechanisms upon which family medicine is to be based.

### **Public health services**

The san-epid system, responsible for core public health services during the Soviet period, continues to play a key role in this area today, though it has been unable to adapt to the appearance of increasingly important complex infectious agents as well as non-communicable diseases.

In 1992, the National Centre for Preventive Medicine, a research institute under the Ministry of Health, initiated an attempt to improve the technical, organizational and scientific capacity for health promotion and disease prevention. This included epidemiological database building, demonstration programs at the regional level, process evaluation and dissemination. As a result of these initiatives partnerships have been established with health agencies in Canada, Sweden and the United States, but so far little has been achieved.

Using policy documents prepared in 1994 (with Canadian assistance) and 1997 (with American assistance), the Ministry of Health developed a "Concept of Strengthening the Health of the Russian Population" in 1998, attempting to define health policy needs, but without specific targets or strategies for the health care system.

Throughout the 1990s the WHO Regional Office for Europe has been strongly advocating

a health-for-all policy as an important tool; however, such a policy has yet to be developed.

A survey of Russian public health literature concludes that while it is officially recognized that reforms of the public health system are imperative, reform goals are poorly defined and the proposed strategies inappropriate to achieving the goals. There is a lack of clarity about the meaning of public health, with a common perception that health care providers, mostly in primary care, can fulfill the role of a public health system.

## Secondary and tertiary care

The infrastructure inherited from the Soviet era remains largely intact, and it is still organized on a territorial basis. The range of secondary and tertiary care facilities includes the following:

Uchastok hospitals and health centres are small, 25 to 50 bed units in areas offering fairly basic inpatient coverage. Rayon (district) hospitals have a 100 to 700 bed capacity, and offer a full range of general and surgical specialities. Rayon polyclinics offer a full range of specialties for those who do not require hospitalization.

Regional hospitals accept referrals of complex cases from district hospitals and polyclinics. All specialties and sub-specialties are represented.

Special focus hospitals and polyclinics are devoted to paediatrics with a full range of specialties and sub-specialties, as well as gynaecology and obstetrics. These take referrals of more complex cases.

Enterprise polyclinics offer some specialist or secondary outpatient care; very few enterprises offer inpatient care. The parallel health care systems of various ministries also tend to concentrate their secondary care services in the outpatient setting. The Ministry of Defense, which provides medical facilities for the army, is the major exception, supporting its own hospitals. There are also other examples of secondary and even tertiary care offered by ministries. Most of

these institutions now contract a portion (usually small) of their services to the health insurance system.

Federal hospitals and polyclinics offer the most complex care at large and specialized institutions, mostly in Moscow. These are often associated with research institutes in respective fields.

Curative and rehabilitative sanatoria were an integral part of the health care system in the Soviet period, making it possible to treat workers for particular conditions. Some regions have specialized hospitals.

Day-care hospitals emerged during the 1990s and are units attached to hospitals and polyclinics, where an entire procedure is done in one day.

All of the above remain under public ownership, with titles vested in the appropriate administrative tier of government. There is an emerging private sector but it is very small. Private facilities include fee-for-service polyclinics, private diagnostic facilities, and a very few private hospitals.

There is considerable over-provision of secondary and tertiary care. In 2000 there were 9.2 beds in acute hospitals per 1000 population, highest in the European Region, and more than double the average of the European Union. Yet the number of beds has actually been declining since 1980.

The annual hospital admission rate of 20 per 100 population in 1999 is the highest of all the NIS and most of the CCEE and western European countries. The average length of stay is also the highest of all the countries in the European Region with the exception of Azerbaijan, and significantly higher than in countries in western Europe. Despite the very high number of hospital beds, the occupancy rate of nearly 86% is on the high end of countries in the European Region.

Policy-makers and planners are acutely aware of over-provision, however the Ministry of Health does not have the authority to close facilities under the authority of regional and local governments. It was hoped that the introduction

of health insurance would influence the balance of care modalities, but there is no indication that this has begun to materialize to date.

The condition of hospitals and polyclinics is very poor; maintenance tasks cannot be carried out and equipment is frequently outdated and in a poor state of repair.

### Social care

Most community care services at the end of the Soviet period were under the Red Cross, financed by voluntary contributions and some state donations. With the economic crisis following the collapse of the Soviet Union, the lack of resources caused this system to disappear. Community care services are therefore very limited. The health care system continues to carry the burden of the country's social needs: long-term inpatient care for the chronically ill, the elderly and those with psychiatric illnesses are carried out within the acute sector. Nor are there adequate services for people with mental or physical handicaps.

A very small number of homes for the elderly are provided through the welfare budget, but these are highly inadequate in terms of both availability and accommodation. Since 1993 there has been an attempt to establish nursing homes for the elderly and chronically ill, and although the model is successful, demand for spaces outstrips supply. Long-term provision therefore tends to be offered through the geriatric beds of mainstream hospitals.

There is no private sector in social care at present.

### **Human resources and training**

The Soviet Union traditionally had high numbers of staff in the health sector, and this continues to be the case today. Doctor numbers (4.2 per 1000 population) are significantly higher than the average for the European Union. The Russian Federation and the NIS average followed an almost identical downward pattern in 1990–1995, after which there followed a marked divergence,

with the NIS figures continuing the downward trend and the Russian Federation swinging sharply upward.

The number of nurses is also relatively high at 7.9 per 1000 population. There are also a large number of pharmacists and dentists, but as they are increasingly operating outside the public sector, precise figures are unavailable.

To qualify as a medical doctor, one needs six years of general medical education and two years of internship are required to become a specialist. The number of specialists recognized is higher than in much of the rest of Europe, with over 80 branches of medicine listed as specialist areas of practice. A three-year training program in general practice was introduced in 1992. Nurses in polyclinics and hospitals are little more than doctors' aides and have a small role in clinical work.

A number of facilities have been developed for the highest nursing education in medical schools. Management skills and related training are also being addressed for the first time.

#### **Pharmaceuticals**

Due to the major disruption following the breakup of the Soviet Union, pharmaceutical production by the mid-1990s in the Russian Federation had dropped by a factor of five, with a corresponding increase in the volume of imports, while consumer prices increased dramatically. By the late 1990s production levels had begun to improve and profit margins increased. By 1997 about 70% of pharmaceutical companies had been privatized.

The major pharmaceutical purchasers are federal, regional and municipal authorities, hospitals and polyclinics, pharmacies, and consumers. The system of pharmaceutical distribution is characterized by a high degree of fragmentation. There are about 3500 wholesalers, fewer than 30 of which offer nation-wide coverage. There are an estimated 16 000 to 19 000 pharmacies, of which 23% belong to regional governments, 60% to municipal authorities, and 17% are private.

Pharmaceuticals are provided by the hospital for inpatients, while outpatients must purchase theirs from pharmacies. In practice, however, due to funding shortages, an estimated 80% of inpatient pharmaceuticals are paid for out-of-pocket by the patients.

While the availability of drugs has increased through imports, drug affordability has fallen and many Russians are unable to purchase needed medications.

Following decentralization, regulation of the pharmaceutical sector is divided between the federal and regional levels. Drug prices are regulated at the federal level by the Ministry of Health, which registers manufacturers' products and prices, as well as mark-up limitations at both the federal and regional levels, although the system is not very effective in controlling mark-ups, hence prices.

The federal government has compiled lists of essential drugs and regional governments develop their own expanded lists derived from the federal. The various ministries and enterprises running their own services develop their own lists.

There are also attempts to encourage prescription of generic drugs, but this is problematic due to unreliable supply, extensive advertising and promotion of brand name drugs, as well as inadequate drug reimbursement and insurance schemes.

## Financial resource allocation

The Ministry of Health and the Ministry of Finance carry out an annual budget cycle reviewing the costs of centrally funded programs. In addition, they calculate the cost of the Guaranteed Package Program for the entire country and based on these costs set non-legally binding targets for each region. In practice, the total amount of financing at the regional level depends less on federal targets and more on the historical budgets of provider institutions.

The system for allocating resources to clinical providers is currently a mixture of two quite distinct approaches with separate payment mechanisms for central and local governments and for insurers. The relative importance of the two allocation routes varies from region to region. The combination of the two approaches is the result of the only partial reform of financing mechanisms that left the balance between insurance contributions and local government payments varying widely from region to region.

The basis for employers' contributions into the health insurance scheme has been set by the federal government. The level of contribution that must be made by local authorities on behalf of the non-working population has not been set centrally and varies widely from region to region. Local authorities in very depressed areas face considerably more problems and efforts of the Ministry of Health to offset variations are not enough to prevent growing inequities.

## Payment of hospitals

The shift to a financing system based on insurance was intended to address issues of perverse incentives and contribute to the improvement of efficiencies in the system. In areas where the insurance system is operational, territorial funds contract with insurance companies, which in turn contract with providers for the provision of care for insured populations. Territorial funds reimburse capitated amounts to the insurance companies, which in turn reimburse providers. In those regions where they are functional, insurance companies negotiate a system of case payments, usually DRGs. However the insurance companies do not seek to negotiate limits to the number of cases treated, and the fact that payments are made retrospectively eliminates any possibility of reducing costs by influencing the hospitals' behaviour.

It is estimated that new payment methods involve only about one-third of hospital revenues, thus further limiting their potential benefits. Nonetheless, the introduction of new payment methods has had some positive impacts, including

the development of new clinical and financial information systems and the increased use of data on hospital utilization, patient diagnostic groups and costs.

## Payment of physicians

All public sector health care personnel work on a salaried basis and most are employed indirectly by the level of government responsible for their particular institution. Employment contracts determine the rate of pay and may specify the hours or shifts to be worked, the volume of work in terms of the number of patients in the catchment area, or the range of responsibilities. Adjustments are made to reflect the attainment of post-graduate qualification, years of experience and the responsibilities of the post, but do not reflect the volume of work carried out or its quality.

Since all medical personnel are effectively employed by the relevant tier of government, basic salary levels are agreed centrally and upgraded annually in line with Ministry of Health and Ministry of Finance estimates of what is feasible within the health system's budget. The use of bonus payments is now commonplace; as much as 20% of an individual's monthly pay may be derived from supplementary payment, but in the absence of any formal performance assessment these payments have typically been awarded across the board.

## **Health care reforms**

The break-up of the Soviet Union exacerbated the problems of the old approach to health services management, creating a more urgent need for reform. The health status of the population went into rapid decline, accelerated enormously by the economic chaos of the 1990s. It became clear to planners and policy makes that the health services, with all their waste and duplication, needed to be overhauled in order to meet the growing needs. It was believed that the key problem to be confronted was the severe

funding shortage, and that establishing a system of social health insurance would provide new sources of non-budget financing, while continuing to provide universal access and comprehensive coverage. Thus, the main thrust of the reform focused on the development of the financing mechanism. Experience to date shows that the reform has been at best only partially successful: it appears that social insurance financing has displaced a portion of budgetary financing, while efficiency gains that were expected from the operation of the insurance system have been very slow to appear. Many of the difficulties experienced have been the product of a loss of central control due to drastic decentralization, and difficulty in implementing the complex new insurance system.

## **Conclusions**

The health care system is still very much in transition, but it is possible to distinguish some trends. The reforms were drawn up with the clear aim of preserving access to a basic package of care for the whole population. However there are very serious threats to equity due to growing differences in economic performance and capability across regions. In addition, as the system comes increasingly to be financed out-of-pocket and under-the-table in the absence of a formal cost-sharing mechanism, equity is clearly being compromised.

Efficiency may have been enhanced in those units able to use incentives effectively, but not to the desired extent, in large measure due to the incomplete implementation of the health insurance legislation.

It is possible that the concept of reforms introduced through the new health care financing mechanism was biased in favor of the perception that the fundamental problem was a lack of sufficient resources. As a result, the issues of health, quality of care, effectiveness and efficiency in the use of resources received too little attention as issues in their own right. The Russian health care system now faces the challenge of trying to secure health gains despite huge uncertainties and formidable constraints.

Table 1. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2001 or latest available year

Country	Hospital beds per 1000 population	s Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Georgia	3.9	4.3	7.4	82.0
Republic of Moldova	4.7	11.9	10.3	70.7
Russian Federation	9.1	21.6	13.2	85.8
Ukraine	7.1	18.7	12.5	89.5
EU average	4.1 <sup>a</sup>	18.9 <sup>b</sup>	7.7 <sup>b</sup>	77.4 <sup>c</sup>
NIS average	7.9	19.1	12.5	85.0

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

Notes: a 2000, b 1999, c 1998.

## **Health Care Systems in Transition**



## HiT summary Russian Federation

The HiT profile on the Russian Federation was written by Ellie Tragakes (European Observatory on Health Care Systems) and Suszy Lessof (European Observatory on Health Care Systems) in collaboration with Yuri M. Komarov (Russian Medical Association), Igor M. Sheiman (Zdravconsult Foundation), Sergey V. Shishkin (Independent Institute for Social Policy), Vadim Tsyboulsky (Central Public Health Research Institute) and Elena Varavikova (Central Public Health Research Institute). The assistance of Kirill D. Danishevski (Open Society Institute) is gratefully acknowledged. The HiT was edited by Ellie Tragakes. The research director of this HiT was Josep Figueras.

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The full text of the HiT can be found in www.observatory.dk.

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 the WHO Regional Office for Europe, the Governments of Greece, Norway and Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. This partnership supports and promotes evidence-based health policymaking through comprehensive and rigorous analysis of health care systems in Europe.