Introduction

Government and recent political history
Bulgaria had a Communist government until 1990. A new constitution was adopted in 1991, according to which Bulgaria became a multiparty parliamentary democracy, governed by a single chamber (the National Assembly) of 240 directly elected parliamentarians. The president is head of state.

Population
The population was 8.0 million in 2001, with 68.4% living in urban areas. It declined throughout the 1990s and has been ageing, due to natural movement, a low birth rate and a high mortality rate. The ethnic composition is 85.8% Bulgarians, 9.7% ethnic Turks, 3.4% Roma, and 1.1% members of other groups. Bulgaria is now one of the poorest regions in central Europe. An estimated 35% of the population lives below the poverty line.

Average life expectancy and health indicators
Life expectancy dropped from 75.1 years in 1989 to 74.6 in 2000 for women, and from 68.6 years in 1989 to 67.6 in 2000 for men. Mortality rates from chronic conditions such as ischaemic and cerebrovascular conditions have increased – strokes are six times the European Union (EU) average – as have deaths from traumas. This trend is associated with unhealthy lifestyles, unbalanced nutrition, worsening environmental conditions and increasing poverty. Infant and maternal mortality rates dropped, however, during the 1990s, so that in 2000 they were 13.3 per 1000 live births and 15.0 per 100 000 respectively.

Recent history of the health care system
Bulgaria’s health care system was patterned along Semashko lines during the Communist period. With the change of regime, many elements of this model of health care were discredited, yet health care reform remained on the periphery of public sector reforms until the late 1990s. The numerous changes of government and the lack of political will for radical reforms meant little...
change until 1997, when the imminent collapse of the health care system became obvious. Attention then turned toward measures aimed at rationalizing the system and improving the effectiveness and efficiency of health care provision.

Reform trends
A step-by-step approach to reform was adopted based on the principles of equity, cost-effectiveness and quality of care. Three major reform strands can be distinguished: reform of health care financing, reorganization of primary care and rationalization of the network of inpatient and outpatient facilities.

Health care expenditure and gross domestic product (GDP)
Public health care expenditure as a share of GDP dropped from a high of 5.4% in 1991 to 3.6% in 2000. If estimates of private spending are included, total health care expenditure as a share of GDP would be roughly 4.4–5.1%.

Overview
Following a cautious approach in the early years after regime change, the health care system has been undergoing rapid transformation since the latter part of the 1990s. Reforms in the early 1990s began by returning to some earlier traditions: first, laws were passed to permit private health care provision; second, medical associations were re-established; and third, responsibility for many health care services was devolved to the municipalities. Far more radical reforms were undertaken toward the end of the decade, including the introduction of a system of social health insurance, development of primary health care based on a general practice model, and rationalization of the health care delivery network. The reforms are ushering in a period during which certain efficiency gains will be made, as can already be seen through hospital bed reductions, a process that will be accelerated through the operation of the new insurance-financed system and new volume-based payment methods. However, efficiency gains may be counterbalanced by a compromise in equity due to problems of access for lower income groups, for whom increasing out-of-pocket payments are making health services unaffordable.

Organizational structure and management
The Ministry of Health develops and implements national health policy, defining goals and priorities for the health system, working out national health programmes and developing health legislation. It retains responsibility for the overall supervision of the health care system, which since 1995 has been administered partly by its regional structures, including a regional health centre in each of the country’s 28 regions. The ministry owns and administers a number of national research centres and is also responsible for the country’s emergency care network and public health network. The Ministry also governs and administers several regional multiprofile and specialized acute care hospitals, as well as the Executive Agency on Pharmaceuticals, which registers drugs and controls the country’s pharmaceutical market.

The Higher Medical Council is a consultative body on health policy, the hospital network, medical education and postgraduate medical training. It is also responsible for the registration of private facilities for ambulatory and hospital care.

In 1992, municipalities were given the ownership of most health care facilities, including municipal hospitals for acute care, some specialized hospitals and outpatient clinics, diagnostic and consultative centres, and some specialized paediatric and gynaecological hospitals.
A number of other ministries own, manage and finance their own health care facilities, including the Ministry of Defence, the Ministry of Internal Affairs and the Ministry of Transport.

In accordance with legislation in 1998, the National Health Insurance Fund was established as an autonomous institution for compulsory health insurance. Its main functions include management of financial resources for medical care. Through its regional bodies, the fund finances the entire health care network for outpatient care, and since July 2000, it also finances those hospitals that it has signed a contract with.

Private practice was legalized in 1991 and has expanded significantly, now including dental practices, pharmacies, physicians’ surgeries, laboratories and outpatient clinics and polyclinics. In addition, there are about 18 private inpatient establishments.

Health care finance and expenditure

Health care financing

Until 2000, the health care system was financed mainly by general taxation through two main sources: the state budget and municipal budgets. Following the enactment of health insurance legislation in 1998, health insurance contributions began to be paid by employers and employees in 1999, but the amount of revenue collected was initially limited by the low tax base (due to low incomes and high unemployment) and contribution evasion. In 2000, the National Health Insurance Fund covered 13% of all public health care expenditures.

The health insurance contribution was set at 6% of income, and employer and employee initially shared the contribution in a 5:1 ratio. These shares are to change in subsequent years so that by 2007 the proportion will be 1:1.

Fig. 2. Number of beds in all hospitals per 1000 population in Bulgaria, selected countries, CEE and EU averages, 1990–2001
Contributions for the unemployed and poor, pensioners, students, soldiers, civil servants and members of other vulnerable categories are covered by the state and local budgets.

Social health insurance financing of outpatient care began in July 2000 and of inpatient care (though only partially) in July 2001. Health insurance revenues now cover all outpatient care and outpatient pharmaceuticals, as well as about 20% of inpatient expenditure. Full coverage of inpatient care is to be achieved gradually as the finances of the insurance fund improve.

**Complementary sources of finance**

Out-of-pocket spending constitutes an estimated 20% of total health care expenditure. Informal payments, common in the 1980s under the previous regime, became increasingly common during the 1990s, and are made in order to obtain drugs in hospitals, to get access to high quality services and for a wide variety of outpatient services.

The scope of these payments and their importance to the reduced health sector budget led the government to introduce health services fees in 1994, despite concerns about their regressive nature. A decree on medical co-payments in 1997 further established a legal basis for cost-sharing. The Ministry of Health developed uniform tariffs in 1997 and 1999 that were mandatory for paid services at public health care institutions. Since 2001, medical establishments have been developing their own price lists for paid services without a physician’s referral.

**Health care benefits and rationing**

The National Health Insurance Fund guarantees the financing of a basic package of services, whose scope and volume is subject to annual agreements signed with the professional medical organizations as part of the National Framework Contract. A basic package was developed for primary care and each clinical specialty in outpatient care, as well as for 40 clinical paths in

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**Fig. 3. Physicians per 1000 population, Bulgaria, selected countries, CEE and EU averages, 1990–2001**

Source: WHO Regional Office for Europe health for all database.
inpatient care that covered over 450 diagnoses in 2002. The National Framework Contract also endorses a list of free or partially free medicines for patients with chronic diseases that is being continually updated. Services not included in the packages are paid for by users.

Health care expenditure

Public health care expenditure as a percentage of GDP dropped from a high of 5.4% in 1991 to a low of 3.2% in 1996, and then rose to 4.2% in 1999 to drop again to 3.6% in 2000. The share of total government expenditure allocated to the health sector has fluctuated substantially during the 1990s, but on the whole it has increased relative to the low of 6.5% in 1990. This share stood at 11% and 9.3% of total government expenditure in 1998 and 1999 respectively.

If estimates of private spending are included, total health care expenditure as a share of GDP would rise to roughly 4.4%–5.1%. This figure is a little below the central and eastern Europe (CEE) average of 5.8% (2000), but substantially below the EU average of 8.5% (1999).

Health care delivery system

Primary health care

The reform in outpatient health care beginning in 1999 was based on three pieces of legislation that regulate the organization of primary care as well as dental care and outpatient care as a whole. This reform foresees the creation of new types of outpatient institutions that embrace single and group practices, medical and dental centres and independent medical diagnostic centres. Practices are assigned in accordance with the National Health Map, an instrument for structural reform that specifies target numbers for institutions and health care professionals by region. The 1999 Law on Health Care Establishments obliges all outpatient providers to choose one of these new organizational forms for outpatient care.

Most existing polyclinics have been transformed into diagnostic and consultation centres or medical centres and registered as trade companies in accordance with the law. The former polyclinic buildings which house the new organizations are owned by the municipalities. The single and group practices have the right to acquire ownership of the premises and medical equipment, or to rent consulting rooms from the municipalities.

The main feature of the reform is the radical change in the form and ownership of the establishments and in their legal status, which has led to equal status among all types of institutions, whether state-owned, municipal or private.

Physicians or centres contract with the National Health Insurance Fund in order to participate in statutory provision; any providers that do not sign contracts can provide private services on a fee-for-service basis.

The reform also tried to guarantee each citizen free choice of family physician. By the end of June 2000, 87% of the Bulgarian population had chosen a family physician for primary care. Due to factors such as a low acceptance of the general practice concept, excessive cost sharing, long waiting times and poor-quality services, a substantial portion of the population is still not in favour of the reform.

Public health services

Public health services are organized by the Ministry of Health and are financed centrally. The system retains the basic structure that existed in the 1950s, when public health concentrated on eradicating communicable diseases. Since 1992, these services have been run by 28 district hygiene and epidemiology inspectorates. The network of these inspectorates covers the entire country. In 1999, the system was restructured, and in addition to sanitary control, its principal functions include implementing preventive and anti-epidemic measures, and protecting and promoting personal and public health.
The National Centre for Health Promotion was created in 1991, and together with the 28 district inspectorates it is responsible for health education.

For the most part, immunization levels for measles, tuberculosis, diphtheria, tetanus, poliomyelitis and pertussis remained above 95% in the 1990s.

**Inpatient care**
Despite its restricted budget, Bulgaria has a much higher ratio of hospital beds to population than many countries in Europe. Bed numbers continued to increase during the first half of the 1990s, and peaked in 1996–1997 at 10.5 per 1000 population. They decreased again, amounting to 7.5 in 2000.

The extensive hospital network throughout the country means that most people have access to some kind of inpatient care. However, it is also the case that there is an excessive and often unnecessary use of beds, often for purposes of social care. The bed reductions in the latter half of the 1990s were the result of deliberate efforts on the part of the government, which recognized that huge cost savings could result from such measures.

The admission rate of 15.8 per 100 population in acute hospitals is in the mid-range for European countries. The average length of stay (10.7 days) is higher than in most countries in the WHO European Region, though it has been dropping steadily since 1980. The occupancy rate for all hospitals, including acute ones, is below two thirds, which is low by European standards.

Some hospitals suffer from a very poor state of repair, a lack of equipment and a shortage of essential supplies. To address some of these problems, a process of hospital accreditation has been initiated, and substandard hospitals are being closed.

**Social care**
Since 1990, social care has been the responsibility of the Ministry of Social Welfare and local social welfare departments financed by state and municipal budgets. A voluntary welfare sector is also becoming established with an increase in NGO activities.

In 1997, there were 199 social homes and facilities providing 50,596 places. The institutions included 65 homes for the elderly, 30 for the physically disabled, 49 for the mentally disabled and 35 for children with physical and mental disorders.

There are different forms of community care for those with low incomes, the elderly and the disabled, who receive some financial support and help in kind, such as assistance with household costs and provision of free food.

Legislation for the social integration of disabled people has been passed but not yet fully implemented. The government recently created a special central fund to finance the rehabilitation and social integration of the disabled.

**Human resources and training**
Bulgaria had 3.4 doctors per 1000 population in 2000. This number is higher than the average for CEE. The trend of this figure over time almost coincides with that for the EU. There has been a slightly increasing trend in doctor numbers during the 1990s, which is likely related to increasing numbers of medical graduates.

Bulgaria is in the mid-range of CEE countries with respect to the number of nurses. A large drop occurred after 1996, most notably in 2000, when the number of nurses per 1000 population fell to 3.9. This trend is due to low prestige and low remuneration levels in the nursing profession.

Doctors are trained at five universities. Undergraduate medical education lasts six years. The curriculum was recently reorganized to include 90 hours of teaching in family medicine. After four years of residence and postgraduate qualification, doctors register their medical qualifications with the Ministry of Health and are then issued a license to practice by the Centre for Postgraduate Training at Sofia Medical University.
All paramedical specialists receive training in 1 of 14 medical colleges. Their teaching activities and curricula were substantially upgraded by a EU Phare Programme project, which also introduced a bachelor degree programme for nurses and paramedical specialists.

In 2001, two faculties of public health were established, offering masters degree programmes in public health and health management. In addition, health management programmes are offered at other universities.

**Pharmaceuticals**

The transition to a market economy involved breaking up the monopoly that was responsible for the production and distribution of pharmaceuticals. These functions are now carried out by state-owned companies, some of which are in the process of being privatized. In 2000, there were 53 manufacturers of pharmaceutical products.

Privatization of supply and distribution has improved the supply of drugs, and consumption has increased, though some of the increase is due to inappropriate use of pharmaceuticals.

The Law on Pharmaceuticals and Pharmacies, adopted in 1995, created the basis for restructuring the pharmaceutical sector. Ten EU directives on good manufacturing practice (GMP) were adopted. They specify methods and means for pharmaceutical production, testing and registration, sales, import, prescribing, dispensing, advertising and storage. A new law on pharmaceuticals was adopted in 2000 to further modernize this sector.

In 1999, the Research Institute on Pharmaceuticals was transformed into the Executive Agency on Pharmaceuticals, responsible for the quality, effectiveness and safety of pharmaceuticals.

Most drugs are paid for out of pocket by patients at market prices. Some expensive drugs are paid for by the Ministry of Health and the National Health Insurance Fund. Certain categories of patients (children, war veterans, etc.) receive partly subsidized drugs.

In 1999, drugs accounted for 25.4% of government expenditure on health care.

**Financial resource allocation**

The Ministry of Health funds university hospitals, specialized health institutions at the national and regional levels, the public health system, national health programmes, medical research and international cooperation in health care.

Municipalities, which became responsible for most health care provision following decentralization in 1992, raise their own revenues and spend on average about 33% of their budgets on health care, though this figure varies widely. Municipalities receive additional resources from the central government.

Prior to the establishment of the health insurance system, funding flows were not sufficiently transparent and accountable, and many decisions were made in response to political and personal priorities rather than the health care needs of the population. This situation led to considerable inequities in the regional distribution of health care funds, inequities that were exacerbated at the local level by variations in municipal budget revenues. Since the establishment of the insurance system in 1999, the National Health Insurance Fund, which is funded by employer and employee contributions and a state subsidy, has paid for all outpatient care and about 20% of inpatient care costs on a contractual basis. Municipalities continue to fund the non-contracted hospitals within their territory, except for the regional hospitals, which are funded by the Ministry of Health. It is expected that the health insurance share of hospital financing will increase, gradually replacing the share funded by state and municipal budgets.
Payment of hospitals

Until reforms in the financing of health care were undertaken, hospitals, polyclinics and other provider institutions were allocated an earmarked budget determined on a historical basis.

At the present time, inpatient care is financed by two main sources: government budgets and health insurance. The National Health Insurance Fund pays only those hospitals with which it has concluded contracts. Payment is made on the basis of diagnoses; in 2001, the insurance fund financed the treatment of 159 diagnoses grouped in 30 clinical paths. In 2002, there were 40 clinical paths with over 450 diagnoses. The fund pays a fixed price for each clinical path and does not engage in active purchasing.

Hospitals which have not contracted with the National Health Insurance Fund continue to be paid by the municipalities, or by central funds in the case of regional hospitals, according to earmarked budgets. As of 1999, all hospitals must conclude contracts with their paying authorities.

Hospitals also receive additional revenues from user fees, which are mandatory for all patients, as well as from fees for services not covered by the insurance fund.

Payment of physicians

Until 2000, all physicians were paid a salary fixed by national collective bargaining. Since then, some new payment mechanisms have been introduced. Family doctors are paid by capitation in accordance with the number of patients on their lists, with some regional variations to compensate for unfavourable geographical locations, and additional remuneration for interventions related to prevention and national health programmes.

Specialists in outpatient care are paid based on the number of visits received. Physicians working in the inpatient sector are salaried.

Health care reforms

Health care reforms in Bulgaria are intended to achieve system sustainability through the introduction of financing mechanisms and an appropriate public-private mix that will ensure equity, consumer satisfaction and improvements in efficiency. Radical changes were introduced in the late 1990s within a relatively short period and involved all key areas of the health care system: organization, delivery, financing and human resource training. Since the reforms were enacted during an economic crisis, it was inevitable that the successes would be hindered by certain difficulties. The difficulties, which stemmed from a lack of managerial expertise and experience and an insufficient public awareness of the reform aims, generated public opposition. At this early stage of the reform process, it is difficult to assess the results, but over the longer term it is expected that efficiency gains (which are already apparent) will accompany an increase in resources available to the health sector through social health insurance, and will ultimately contribute to the achievement of health gains.

Conclusions

There is now broad recognition among the Bulgarian people that reform of the previous system was necessary, and that an irreversible process of change has been set into motion. This process has been based on what is generally perceived to be a good idea in principle, but which has not, however, been supported by appropriate financial and technical resources. In order to increase public support for the reform process, it is now necessary for the government to fine-tune the major changes introduced in recent years and to ensure that better quality care will be delivered.
The HiT profile on Bulgaria was written by Stayko Koulaksazov (Ministry of Health), Svetla Todorova (Ministry of Health), Ellie Tragakes (European Observatory on Health Systems and Policies) and Stoyka Hristova (Zakrila). The HiT was edited by Ellie Tragakes. The Observatory gratefully acknowledges Antonio Duran (Tecnicas de Salud), Gena Grancharova (Higher School of Medicine, Pleven) and Dominic S. Haazen (World Bank) for reviewing the HiT. We are also grateful to the Bulgarian Ministry of Health for its support.

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 Systems and Policies.

The Observatory is a unique undertaking that brings together the WHO Regional Office for Europe, the governments of Belgium, Finland, Greece, Norway, Spain and Sweden, 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 policy-making through comprehensive and rigorous analysis of health care systems in Europe.

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### Table 1. Inpatient utilization and performance in all hospitals in the WHO European Region, 2000 or latest available year, where acute hospital bed data are not available

<table>
<thead>
<tr>
<th>Country</th>
<th>Hospital beds per 1000 population</th>
<th>Admissions per 100 population</th>
<th>Average length of stay in days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>3.3(^a)</td>
<td>8.8(^a)</td>
<td>6.9(^a)</td>
</tr>
<tr>
<td>Belarus</td>
<td>12.6</td>
<td>30.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7.2</td>
<td>15.3</td>
<td>10.7</td>
</tr>
<tr>
<td>Greece</td>
<td>4.9(^b)</td>
<td>15.4(^c)</td>
<td>8.3(^c)</td>
</tr>
<tr>
<td>Latvia</td>
<td>8.2</td>
<td>20.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Poland</td>
<td>5.6(^b)</td>
<td>15.5(^c)</td>
<td>8.9(^a)</td>
</tr>
<tr>
<td>Romania</td>
<td>7.5</td>
<td>24.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>5.3</td>
<td>13.8</td>
<td>11.6</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>5.4(^b)</td>
<td>10.6(^c)</td>
<td>11.0(^c)</td>
</tr>
<tr>
<td>CEE average</td>
<td>6.5</td>
<td>17.9</td>
<td>9.6</td>
</tr>
<tr>
<td>EU average</td>
<td>5.8(^b)</td>
<td>18.4(^b)</td>
<td>10.0(^c)</td>
</tr>
<tr>
<td>NIS average</td>
<td>9.2</td>
<td>19.4</td>
<td>14.4</td>
</tr>
</tbody>
</table>

Source: WHO Regional Office for Europe health for all database.
Note: \(^a\) 2000, \(^b\) 1999, \(^c\) 1998.
Acute hospital data provide a more accurate picture of utilization and performance, as well as a more reliable basis for comparison across countries, than the data corresponding to all hospitals shown in this table. The all-hospital data shown here is only for countries which do not provide acute hospital data and should be taken as indicative of general trends.